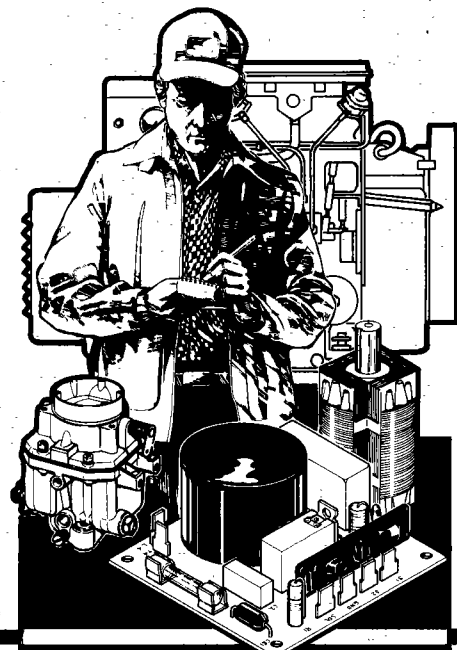

Onan

Parts Manual NH AUX GenSet

**Auxiliary Power Generators
For Truck Applications
6.5 kW Unit**



Onan Service Parts

940-0224
3-91 (Spec P-R)
Replaces 10-84
Printed in U.S.A.

SAFETY PRECAUTIONS

The following symbols are used in Onan manuals to alert users to the potentially dangerous conditions relating to maintenance of the equipment and replacement of parts. Please read and observe.

▲ DANGER

This symbol warns of immediate hazards which will result in severe personal injury or death.

▲ WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

▲ CAUTION

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

MODEL IDENTIFICATION

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO., and SERIAL NO. from the Onan nameplate.

For handy reference, insert your nameplate information in the spaces below:

MODEL AND SPEC NO. _____

SERIAL NO. _____

PRODUCT SAFETY PRECAUTIONS

▲ WARNING

Contact with USED ENGINE OILS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking or changing engine oils take all necessary precautions not to ingest, breathe the fumes or contact the used oil.

▲ WARNING

Contact with ASBESTOS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When handling engine gaskets take all necessary precautions not to ingest, breathe or contact the dust from the gaskets! Use adequate ventilation and wear protective gloves, masks and clothing!

▲ WARNING

Contact with BENZINE and LEAD, found in gasoline, fuel additives and solvents has been identified by a United States federal agency and some USA agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking, draining or adding gasoline and fuel additives, or using solvents take all necessary precautions not to ingest, breathe the fumes, or contact the liquids. Use adequate ventilation and wear protective gloves, masks and clothing!

Introduction

This Catalog applies to the Standard 6.5 NH Auxiliary Generator Set for Trucks. Parts are arranged in groups of related items. Each illustrated part is identified by a reference number corresponding to the same reference number in the parts list for that group. Parts illustrations are typical. Using the Model and Spec No. from the nameplate, select parts from this Catalog that apply to your set. Unless otherwise mentioned in the description, parts are interchangeable between models. Right and left sides are determined by facing the engine end (front) of the set.

Generator Set Data Table

MODEL AND SPECIFICATION NUMBER	ELECTRICAL DATA					
	TYPE	WATTS	VOLTS	HERTZ	WIRE	PHASE
6.5 NH-3CR/*	Remote	6500	120/240	60	**	Single
6.5 NH-FJ/*	Remote	6500	120/240	60	**	Single

* - The Specification letter advances (A to B to C, etc.) with manufacturing changes.

** - Set is reconnectible for 120 volt, 2 wire; 240 volt, 2 wire; or 120/240 volt, 3 wire service.

NOTE: The letter R in the Model and Spec denotes Electric Start with Start-Stop at both the Set and the Remote Control.

STANDARD PARTS SECTION

This section contains the parts used on standard generator sets.

Index

- Adapter, Air Duct 16
- Adapter, Choke 16
- Adapter, Generator 26
- Adapter, Oil Filter 10
- Alarm, Audible 25
- Arm and Shaft, Governor 12
- Armature, Generator 26

- Backplate, Scroll 33
- Baffle, Breather 4
- Ball, Fly - Governor 7
- Ball, Joint - Governor Rod 12
- Base, Breaker 19
- Base, Oil 8
- Baseplate, Housing 30
- Bearing, Ball - Generator 26
- Bearing, Ball - Governor Shaft 12
- Bearing, Camshaft 4
- Bearing, Connecting Rod 11
- Bearing, Crankshaft 4
- Bearing, Rear 4
- Bearing, Sleeve - Flanged (Crankshaft) 4
- Bell, End 26
- Block, Brush 26
- Block, Cylinder 4
- Board, Printed Circuit 28
- Box, Breaker 18
- Box Components, Breaker 19
- Box, Control 25,28
- Box, Outlet 28
- Brace, Air Intake Duct 14
- Bracket and Tube - Preheater 15
- Bracket, Air Duct Support 14
- Bracket, Air Intake Duct 14
- Bracket, Control Mounting 28
- Bracket, Fuel Tank 34
- Bracket, Governor Mounting 12
- Bracket, Latch Handle 30,32
- Bracket, Lifting 33
- Breaker, Circuit 25
- Brush, AC 26
- Brush, DC 26
- Bushing, Piston Pin 11

- Cable, Spark Plug 18
- Camshaft 7
- Cap, Fuel Tank 34
- Cap and Indicator - Oil Fill 8
- Cap and Valve, Breather 4
- Carburetor 16
- Carburetor Components - Gasoline 20,21
- Choke, Electric 16
- Clamp, Air Duct 14
- Clamp, Breather Tube 4,35
- Clamp, Coil Mounting 18
- Clamp, Hanger - Generator Adaptor 26
- Clamp, Hose - Preheater 15
- Clamp, Muffler 22
- Clamp, Muffler Hanger 22
- Cleaner, Air 14
- Clip, Bearing Retainer 26
- Clip, Sensitivity - Governor 12
- Coil, Ignition 18
- Commutator, Generator 26
- Condenser, Ignition 18,19
- Connector, Female - Fuel Line 34
- Control 28
- Control, Air Temperature 15
- Control, Remote 25
- Cover, Air Cleaner 14
- Cover, Breaker Box 19
- Cover, Generator 26
- Cover, Outlet Box 28
- Cover, Scroll 33
- Cover, Valve 4
- Crankshaft 6
- Cup, Governor 7
- Cup, Oil Intake 10
- Cushion, Vibration 8

- Drain, Oil Filter 10
- Duct, Air Cleaner 14

- Element, Air Cleaner 14
- Element and Cover - Choke 16
- Exhaust System 22
- Extension, Scroll 33

- Fan, Generator 26
- Filler, Breaker 25
- Filter, Oil 10
- Flywheel 6
- Frame, Side Mount 32
- Fuse - 5,10,30 Amp 24,28
- Fuel System 16

- Gasket, Bearing Plate 4,36
- Gasket, Breaker Box 19,36
- Gasket, Carburetor Mounting 16,36
- Gasket, Cylinder Head 4,36
- Gasket, Exhaust 22,36
- Gasket, Exhaust Manifold 22,36
- Gasket, Fuel Tank 34
- Gasket, Gearcase 12,36
- Gasket, Governor Mounting Bracket 12
- Gasket, Housing Mounting 30
- Gasket, Intake Manifold 16,36
- Gasket, Mounting - Valve Cover 4,36
- Gasket, Oil Base 8,36
- Gasket, Oil Fill Cap 8,36
- Gasket, Oil Filter Adapter 10,36
- Gasket, Oil Pan Mounting 8,36
- Gasket, Valve Guide 4,36
- Gauge, Fuel 34
- Gear, Camshaft 7
- Gear, Crankshaft 6
- Gearcase 12
- Generator 26
- Guard, Scroll 33
- Guide, Valve 4

- Handle, Latch 30,32
- Hanger, Clamp - Muffler 22
- Hanger, Exhaust 26
- Hanger, Muffler 22
- Harness, Wiring 26
- Harness, Wiring - Remote 25
- Head, Cylinder 4
- Holder, Fuse 24,28
- Hose, Duct 15
- Hose, Oil Drain 8
- Housing, Air - Cylinder 33
- Housing, Blower 33
- Housing, Choke 16
- Housing, Control 15
- Housing (Over the Rails) 30
- Housing (Side Mounted) 32
- Hub, Governor Cup 7

- Ignition 18
- Indicator, Oil Level 8
- Insulator, Breather 35
- Insulator, Resistor 28

Index

Kit, Decal 36
 Kit, Gasket - Carbon Removal 36
 Kit, Gasket - Complete Engine 36
 Kit, Gasket - Gasoline Carburetor 20,21
 Kit, Gasket - Oil Pump 10,36
 Kit, Ignition Tune-Up 19
 Kit, Piston Ring 11
 Kit, Repair - Gasoline Carburetor 20,21

 Lead, Spark Plug 18
 Line, Fuel 16,34
 Linkage, Governor 12
 Lock, Valve Spring 4
 Loctite, Bottle 36

 Manifold, Exhaust 22
 Manifold, Intake 16
 Meter, Hour 25
 Mounting, Hardware - Generator Set 8
 Muffler, Exhaust 22

 Nameplate (Aux) 30,32
 Nipple, Spark Plug 18
 Numerical Index 37,38,39,40

 Paint, Touch-Up 36
 Pan, Oil Base 8
 Panel, Control 25
 Pin, Alignment 12,26
 Pin, Bearing Stop 4
 Pin, Camshaft 7
 Pin, Piston 11
 Piston 11
 Plate, Rear Bearing 4
 Plate, Mounting 8
 Plug, Expansion 4
 Plug, Spark 18
 Plunger, Breaker Points 18
 Point Set, Breaker 19
 Pump, Fuel - Electric 16
 Pump, Oil 10

 Receptacle, 15 Amp 25
 Rectifier, Silicon 28
 Regulator, Voltage 24
 Relay (SPDT) 28
 Relay, Start Solenoid 28
 Resistor (100 Ohm) 28
 Ring, Collector - Generator 26
 Ring, Retaining - Flywheel 6
 Ring, Retaining - Piston Pin 11
 Rod, Connecting 11
 Rod, Governor Arm 12,35
 Rotator, Valve 4

 Screen, Breather Tube 4
 Scroll, Air 33
 Seal, Air - Oil Filter 10
 Seal, Air Cleaner Element 14
 Seal, Air Duct 14
 Seal, Air Duct Adapter 14
 Seal, Breather Tube 4
 Seal, Exhaust Tube 22
 Seal, Intake Valve 4,36
 Seal, O-Ring - Carburetor 16
 Seal, Oil - Bearing Plate 4,36
 Seal, Oil - Gearcase 12,36
 Seal, Oil - Governor Shaft 12,36
 Sealant, Thread 36
 Seat, Valve Insert 4
 Shaft and Arm, Governor 12
 Shutter, Air Temperature Control 15
 Spacer, Air Intake 14
 Spring, Brush 26
 Spring, Governor 12
 Spring, Oil By-Pass Valve 10
 Spring, Shutter Return 15
 Spring, Valve 4
 Stator, Alternator 24
 Stator, Generator 26
 Step, Truck 32
 Strap, Ground 30,34
 Support, Generator 26
 Switch, Oil Pressure 10
 Switch, Push 28
 Switch, Rocker - On/Off 25

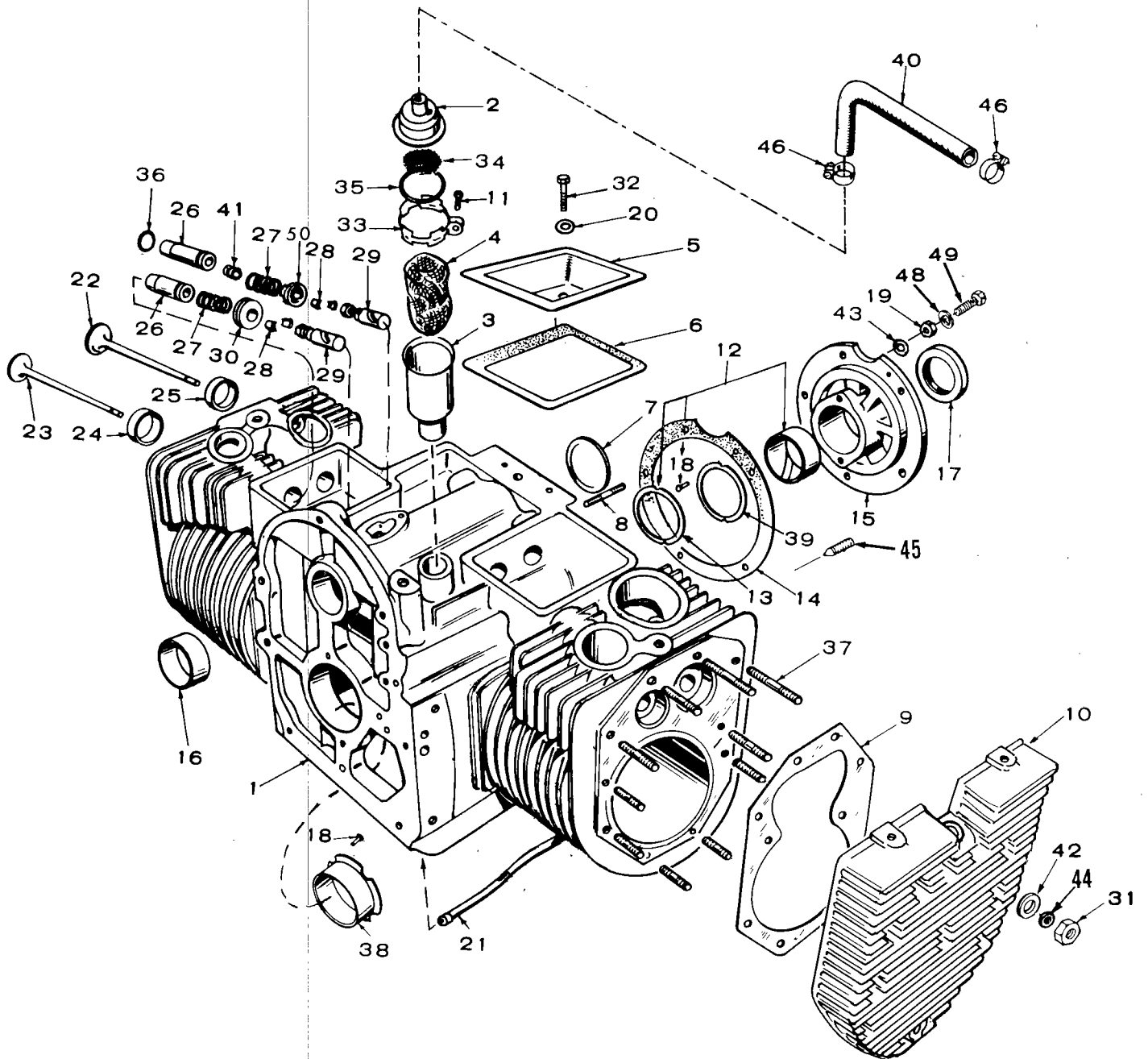
 Tank, Fuel 34
 Tappet, Valve 4
 Tube, Breather - Crankcase 4
 Tube, Exhaust - Pipe 22
 Tube, Oil - Crankcase 4

 Valve, Exhaust 4
 Valve, Intake 4
 Valve, Oil Bypass 10
 Valve, Oil Drain 9
 Vernatherm, Preheater 15

 Wheel, Blower 6
 Wrapper, Air Cleaner 15
 Wrapper, Generator 26

 Yoke, Governor Shaft 12

Cylinder Block

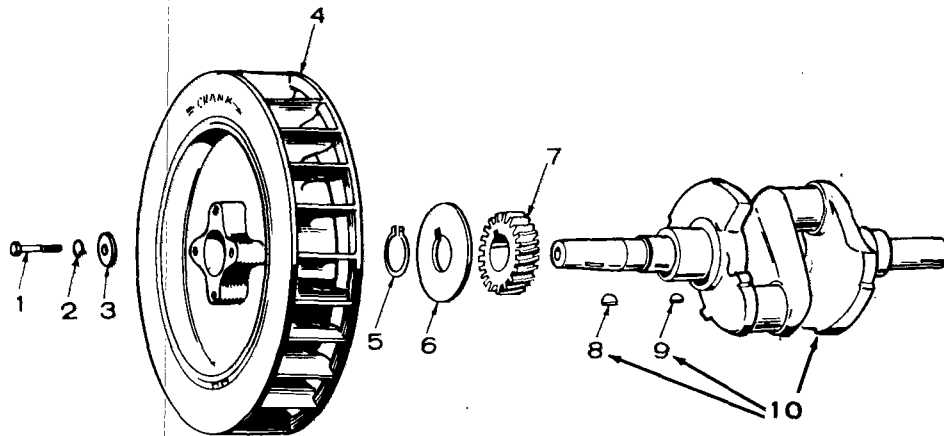


Cylinder Block

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	110-2340	1	Block, Cylinder (Includes Parts Marked *)	30			Rotator, Valve
2	123-0954	1	Cap and Valve, Breather		110-0904	4	Spec P
3	123-0952	1	*Tube, Breather		110-0904	2	Begin Spec R
4	123-1417	1	Baffle, Breather	31	104-0091	20	Nut, Hex - Special
5	110-1624	2	Cover, Valve	32	800-0011	2	Screw, Cap - Hex Head (1/4-20 x 2" Lg)
6	110-3575	2	Gasket, Mounting - Valve Cover	33	123-0951	1	Clamp, Loop - Breather Tube
7	517-0048	1	*Plug, Expansion				Cap
8	520-0736	5	*Stud, Mounting - Bearing Plate	34	123-0958	2	Screen, Tube - Breather
9	110-2987	2	Gasket, Mounting - Cylinder Head	35	509-0117	1	Seal, "O" Ring - Breather Tube
10	110-3549	2	Head, Cylinder	36	110-0068	2	*Gasket, Intake - Valve Guide
11	809-0035	1	Screw, Tapping - Round Head (#8 x 3/4" Lg)	37			Stud, Mounting - Cylinder Head
12			Bearing, Rear - Crankshaft				Spec P
	101-0450	1	* Standard		520-0717	8	3/8 x 1-7/8" Lg
	101-0450-02	1	.002" Undersize		520-0773	12	3/8 x 2-9/16" Lg
	101-0450-10	1	.010" Undersize				Spec R
	101-0450-20	1	.020" Undersize		520-0919	8	3/8 x 2-19/32" (Install 4 Bottom Holes - RH, LH Heads)
	101-0450-30	1	.030" Undersize				3/8 x 2-3/4" (Install 2 Top Holes - RH, LH Heads)
13	104-0575	2	*Washer, Thrust - Crankshaft Bearing		520-0876	4	3/8 x 3" (Install 4 Middle Holes - RH, LH Leads)
14	101-0782	1	*Gasket, Plate - Bearing		520-0918	8	Bearing, Sleeve - Flanged
15	101-0439	1	*Plate, Bearing - Rear	38			Crankshaft
16	101-0405	2	*Bearing, Camshaft				* Standard
17	509-0041	1	Seal, Oil - Crankshaft		101-0432	1	.002" Undersize
18	516-0072	4	*Pin, Stop - Bearing		101-0432-02	1	.010" Undersize
19	104-0091	5	*Nut, Hex - Special		101-0432-10	1	.020" Undersize
20	526-0063	2	Washer, Flat (Copper) (1/4" Screw)		101-0432-20	1	.030" Undersize
21	120-0680	1	*Tube, Oil - Crankcase	39	104-0776	AR	Shim, Thrust - Crankshaft
22	110-1718	2	Valve, Intake	40	503-0857	1	Tube, Breather
23	110-1761	2	Valve, Exhaust	41	509-0168	2	Seal, Valve - Intake
24			Insert, Seat - Valve Exhaust	42	526-0250	20	Washer, Flat (3/8" Screw)
	110-1716	2	* Standard	43	526-0251	5	Washer, Flat (3/8" Screw)
	110-1716-02	2	.002" Oversize	44	851-0029	24	Washer, Lock - Compression (Special) - Begin Spec R
	110-1716-05	2	.005" Oversize				Screw, Socket - Set (3/8-16 x 5/8")
	110-1716-10	2	.010" Oversize	45	803-0071	2	Clamp, Tube - Breather
	110-1716-25	2	.025" Oversize	46	503-0171	2	Washer, Lock (3/8") - Later Models
25			Insert, Seat - Valve Intake	48	850-0050	5	Screw, Cap - Hex Head Flanged Head (Special) - Begin Spec R
	110-1933	2	* Standard				(3/8-16 x 1-1/4") - Later Models
	110-1933-02	2	.002" Oversize	49	800-0575	5	Washer, Retainer - Intake
	110-1933-05	2	.005" Oversize				Valve Spring (Begin Spec R)
	110-1933-10	2	.010" Oversize				
	110-1933-25	2	.025" Oversize				
26			*Guide, Valve		800-0051	5	
	110-3167	2	Exhaust	50	110-0893	2	
	110-3168	2	Intake				
27	110-0539	4	Spring, Valve				
28	110-0639	8	Lock, Spring - Valve				
29			Tappet, Valve				
	115-0006	4	Standard				
	115-0006-05	4	.005" Oversize				

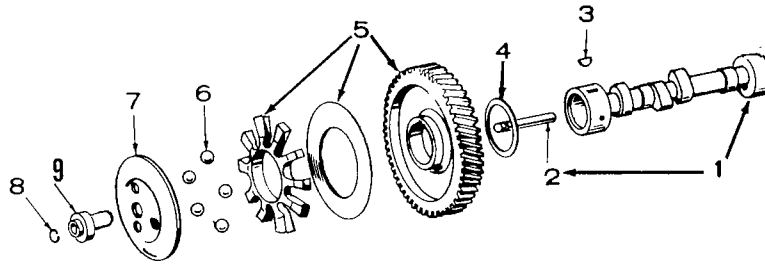
* - Parts Included in 110-2340 Cylinder Block.

Crankshaft and Flywheel



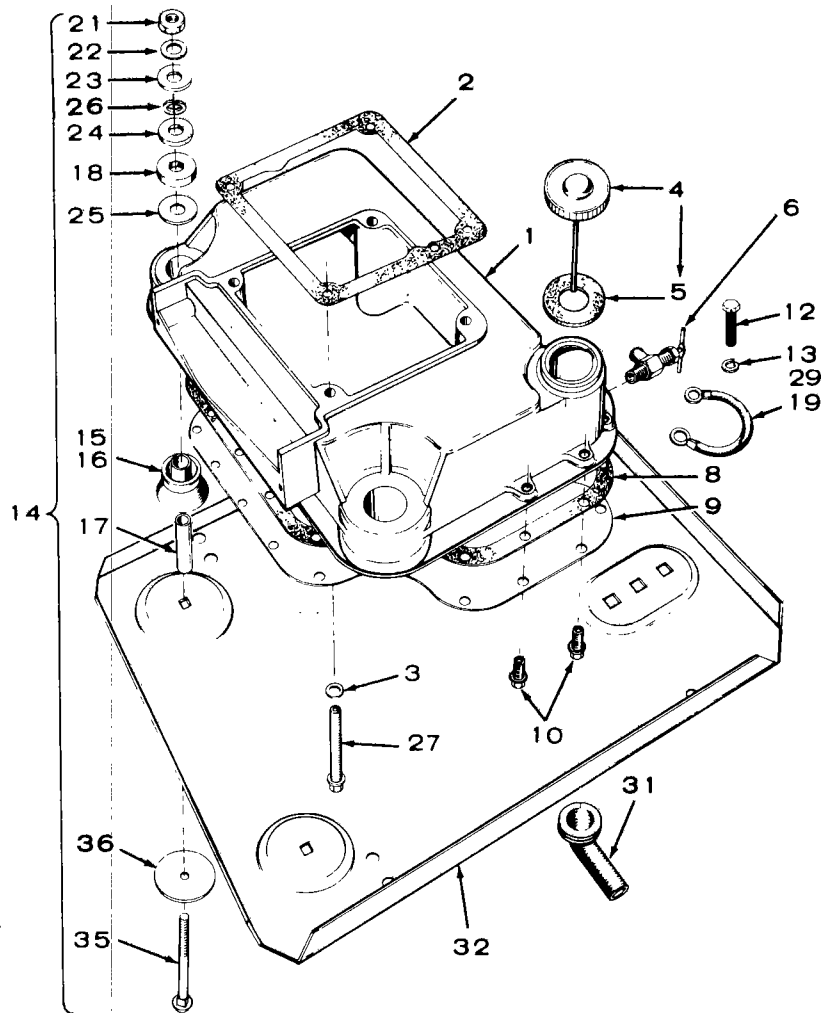
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	104-0170	1	Screw, Cap - Hex Head (Special)	5	518-0014	1	Ring, Retaining
2			Washer	6	104-0043	1	Washer, Gear (Special)
	526-0356	1	Flat (7/16") Begin Spec R	7	104-0032	1	Gear, Crankshaft
	850-0055	1	Lock - (7/16")	8	515-0263	1	Key Kit
3	526-0262	1	Washer, Flat (7/16")	9	515-0001	1	Key, Woodruff
4	134-4105	1	Flywheel (Includes Magnets)	10	104-1314	1	Crankshaft (Includes Keys)

Camshaft



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	105-0638	1	Camshaft (Includes Center Pin)	6	510-0015	10	Ball, Fly - Governor
2	150-0075	1	Pin, Camshaft	7	150-1520	1	Cup, Governor
3	515-0001	1	Key, Gear - Camshaft	8	150-0078	1	Ring, Retaining
4	105-0541	1	Washer, Thrust	9	150-1519	1	Hub, Cup - Governor
5	105-0332	1	Gear, Camshaft (Includes Plate and Spacer)				

Oil Base and Mounting Hardware

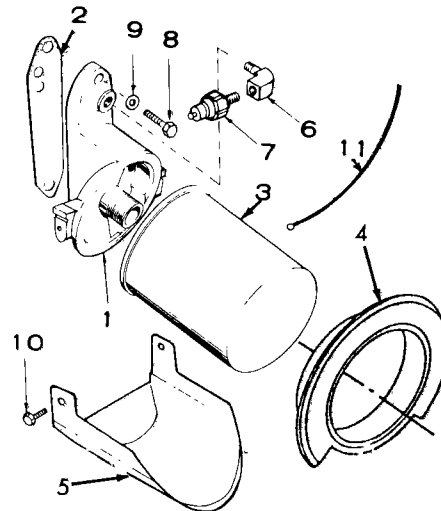
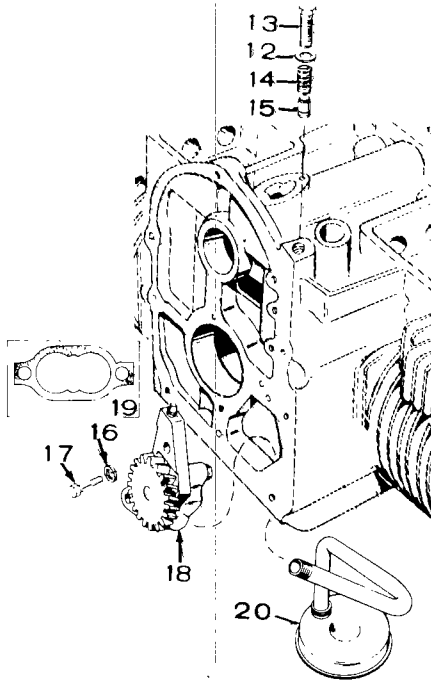


Oil Base and Mounting Hardware

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	102-0957	1	Base, Oil (Includes Parts Marked *)	22			Washer, Lock - EIT (7/16")
2	102-1387	1	*Gasket, Base - Oil	850-0055	2	#	Engine End
3	526-0030	4	Washer, Flat (3/8")	856-0012	1	#	Generator End (Left Side)
4	123-1400	1	Cap and Indicator, Oil Fill	850-0055	1	#	Generator End (Right Side)
5	123-0191	1	Gasket, Cap - Oil Fill	850-0055	4	+	Engine and Generator Ends
6	504-0092	1	Valve, Drain - Oil	23			+ #Washer, Flat (7/16")
8	102-1275	1	*Gasket, Mounting - Oil Pan	526-0014	2		Engine End
9	102-0889	1	*Pan, Base - Oil	526-0014	1		Generator End (Left Side)
10	821-0018	20	*Screw, Cap - Hex Washer Head (1/4-20 x 5/8")	526-0014	1		Generator End (Right Side)
12	800-0047	1	Screw, Cap - Hex Head (3/8-16 x 5/8")	24			Washer, Flat (9/16")
13	856-0010	2	Washer, Lock - EIT (3/8")	526-0198	4	#	Engine End
14			Package, Hardware Mounting - Side Mounted (Includes Parts Marked #)	526-0198	1	#	Generator End (Left Side)
	402-0477	1	Engine End - Use 402-0480	526-0198	1	#	Generator End (Right Side)
	402-0480	1	Generator End (Left Side)	526-0198	8	+	Engine and Generator Ends
	402-0480	1	Generator End (Right Side)	25			+ #Washer, Flat (1")
15	402-0283	2	#Cushion, Vibration - Engine End	526-0286	1		Generator End (Left Side)
16			Cushion, Vibration - Generator End	526-0286	1		Generator End (Right Side)
	402-0283	1	# Left Side	26	856-0016	1	#Washer, Lock - EIT (5/8") - Right Side Generator End
	402-0283	1	# Right Side	27	800-0064	4	Screw, Cap - Hex Head (3/8-16 x 4-1/2")
	402-0284	4	+ Engine & Generator Ends	28	850-0050	4	Washer, Lock - Spring (3/8")
17			+ #Spacer, Sleeve	29	337-0090	1	Strap, Ground
	402-0290	2	Engine End	31	503-0568	1	Hose, Drain - Oil
	402-0290	1	Generator End (Left Side)	32			Plate, Mounting
	402-0290	1	Generator End (Right Side)		403-1836	1	Side Mounted
18			+ #Snubber		403-1484	1	Over the Rails
	402-0282	2	Engine End	35			Bolt, Carriage (7/16-14 x 3-1/2")
	402-0282	1	Generator End (Left Side)	816-0206	2	#	Engine End
	402-0282	1	Generator End (Right Side)	816-0206	1	#	Generator End (Left Side)
19	336-3967	1	Lead, Ground	816-0206	1	#	Generator End (Right Side)
21			#Nut, Hex (7/16-14)	816-0207	4	+	7/16-14 x 3-3/4" - Engine and Generator Ends
	862-0004	2	Engine End	36			Washer, Flat
	862-0004	1	Generator End (Left Side)	526-0038	1		5/8" Screw
	862-0004	1	Generator End (Right Side)	526-0182	4		1/2" Screw - Engine and Generator Ends

* - Parts Included in 102-0957 Oil Base.
- Parts Included in Hardware Mounting Package.
+ - Use With Ground Strap.

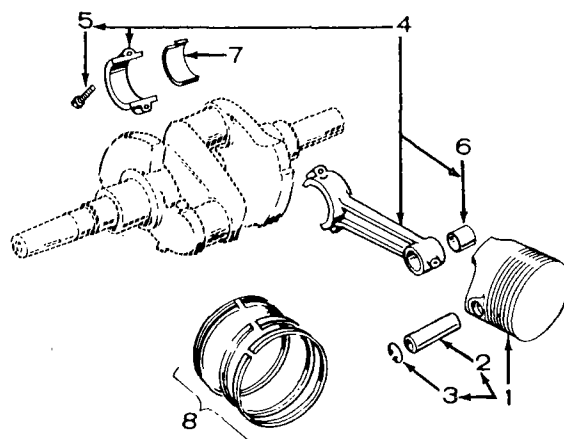
Oil System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	122-0320	1	Adapter, Filter - Oil
2	122-0774	1	Gasket, Mounting - Oil Filter
3	122-0323	1	Adapter
4	122-0502	1	Filter, Oil - Spin-on
5	122-0360	1	Seal, Air - Oil Filter - Over the Rails Models
6	502-0053	1	Drain, Filter - Oil
7	309-0319	1	Elbow, Street - 45°
8	800-0028	2	Switch, Pressure - Low Oil
9	526-0065	2	Screw, Cap - Hex Head (5/16-18 x 1")
10	815-0194	2	Washer, Flat - Copper (5/16" Screw)
11	336-7000	1	Screw, Tapping - Hex Head (#10-32 x 3/8")
			Lead, Electrical - Low Oil Pressure Switch - Use 4 Feet Bulk Wire

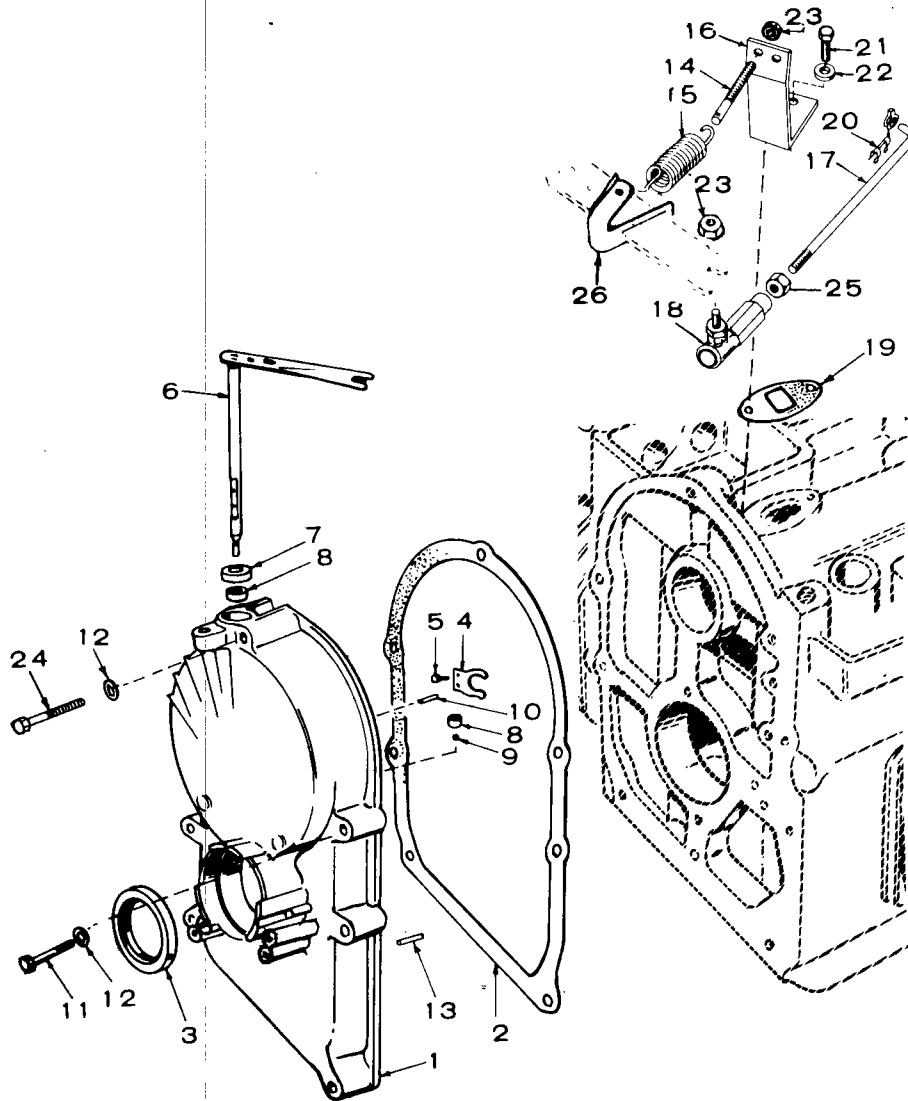
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	526-0066	1	Washer, Flat - Copper (3/8" Screw)
13	801-0050	1	Screw, Cap - Hex Head (3/8-24 x 1")
14	120-0140	1	Spring, Valve - Oil By-Pass
15	120-0398	1	Valve, By-Pass - Oil
16	740-1004	2	Washer, Flat (M6)
17	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")
18	120-0491	1	Pump, Oil (Components Not Sold Separately)
19	120-0161	1	Kit, Gasket - Oil Pump
20	120-0413	1	Cup, Intake - Oil Pump (Includes Screw Pipe and Cup)

Piston and Rod



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston and Pin Set (Includes Retaining Ring)	7			Bearing, Half - Connecting Rod
	112-0228	2	Standard		114-0188	4	Standard
	112-0228-05	2	.005" Oversize		114-0188-02	4	.002" Undersize
	112-0228-10	2	.010" Oversize		114-0188-10	4	.010" Undersize
	112-0228-20	2	.020" Oversize		114-0188-20	4	.020" Undersize
	112-0228-30	2	.030" Oversize		114-0188-30	4	.030" Undersize
	112-0228-40	2	.040" Oversize	8			Kit, Piston Ring
2	112-0069	2	Pin, Piston (Standard)		113-0203	2	Standard
3	518-0294	4	Ring, Retaining - Piston Pin		113-0203-05	2	.005" Oversize
4	114-0203	2	Rod, Connecting		113-0203-10	2	.010" Oversize
5	805-0010	4	Bolt, Place		113-0203-20	2	.020" Oversize
6	114-0036	2	Bushing, Pin - Piston		113-0203-30	2	.030" Oversize

Gearcase and Governor

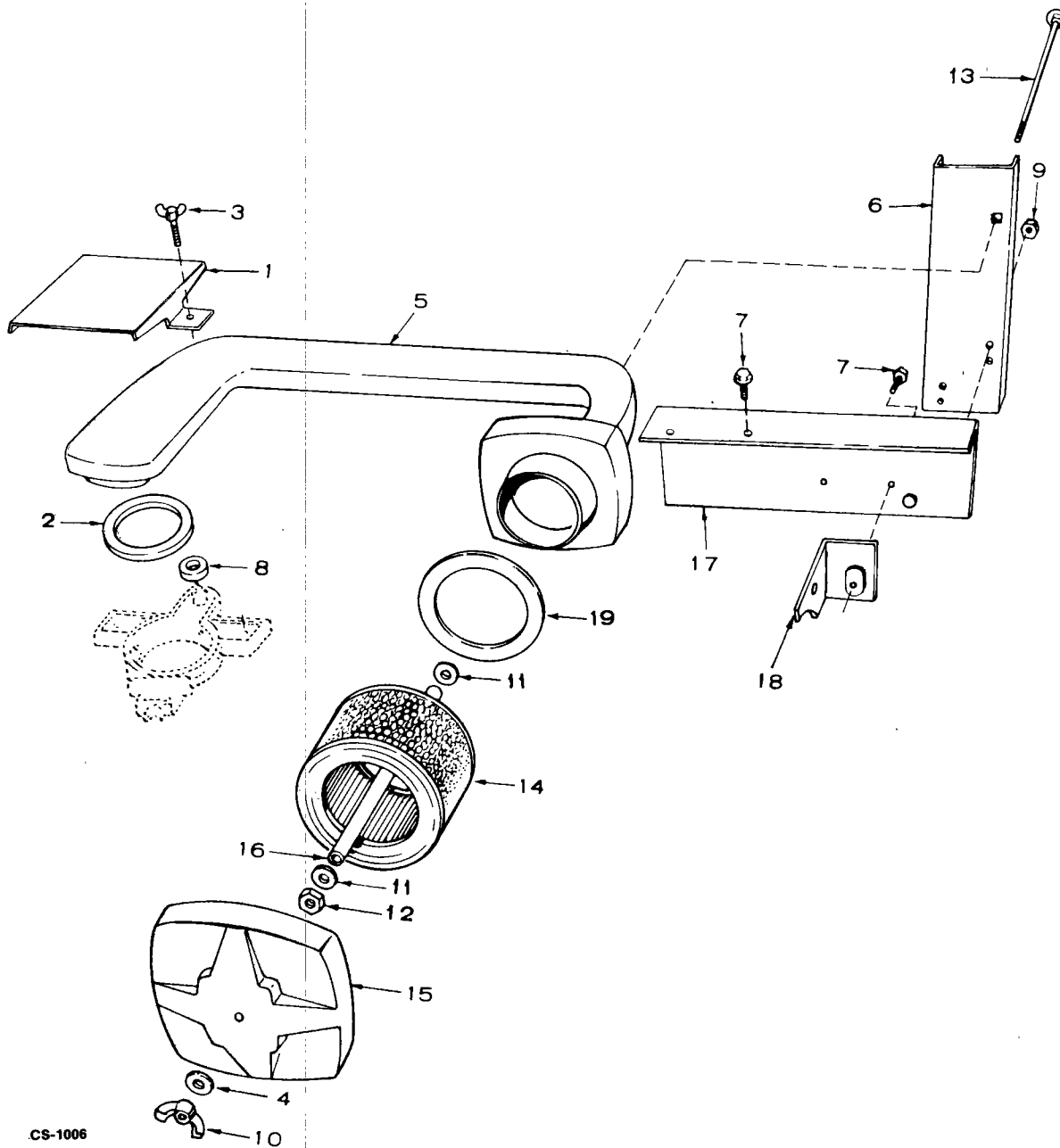


Gearcase and Governor

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	103-0641	1	Gearcase (Includes Parts Marked *)	16	150-1577	1	Bracket, Mounting - Governor
2	103-0810	1	Gasket, Mounting - Gearcase	17	150-0979	1	Rod, Governor Arm to Carburetor
3	509-0040	1	*Seal, Oil	18	150-0639	1	Ball, Joint
4	150-1187	1	*Yoke, Governor	19	149-0003	1	Gasket, Mounting - Governor Bracket
5	815-0046	2	*Screw, Machine - Pan Head (#8-32 x 3/8" Lg)	20	518-0004	1	Clip, Retaining - Rod End
6	150-1542	1	*Arm and Shaft, Governor	21	800-0004	2	Screw, Cap - Hex Head - Governor Bracket Mounting (1/4-20 x 5/8" Lg)
7	509-0008	1	*Seal, Oil	22	526-0063	2	Washer, Flat (Copper) - Governor Bracket Mounting (1/4" Screw)
8	510-0013	2	*Bearing, Needle	23	870-0131	1	Nut, Self-Locking (1/4-20)
9	510-0014	1	*Bearing, Ball - Governor Shaft	24	800-0034	1	Screw, Cap - Hex Head - Gearcase Mounting (5/16-18 x 2-1/4" Lg)
10	516-0130	1	*Pin, Stop - Governor Cup	25	870-0053	1	Nut, Hex (#10-32)
11	800-0032	4	Screw, Cap - Hex Head - Gearcase Mounting (5/16-18 x 1-3/4" Lg)	26	150-0678	1	*Clip, Sensitivity
12	526-0065	6	Washer, Flat (Copper) - Gearcase Mounting (5/16" Screw)				
13	516-0141	2	Pin, Alignment - Gearcase				
14	150-0096	1	Stud, Adjustment - Speed				
15	150-1612	1	Spring, Governor				

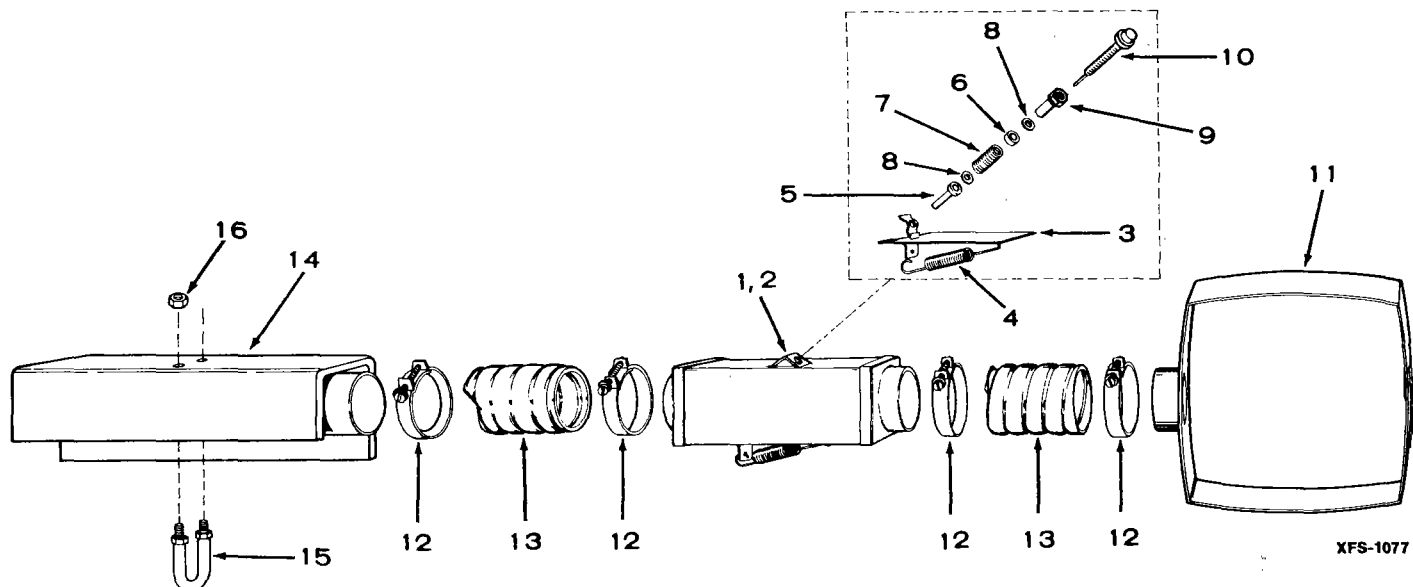
* - Parts Included in 103-0519 Gearcase.

Air Cleaner



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	140-1520	1	Clamp, Duct - Air	10	865-0019	1	Nut, Wing (1/4-20)
2	140-1502	1	Seal, Air Duct to Adapter	11	526-0158	2	Washer, Flat
3	518-0390	2	Screw, Wing (1/4-20 x 3/4")	12	870-0212	1	Nut, Hex - Locking (1/4-20)
4	526-0021	1	Washer, Flat (1/4" Screw)	13	816-0070	1	Bolt, Carriage (1/4-20 x 6-1/2")
5	140-1503	1	Duct, Cleaner - Air	14	140-0495	1	Element, Cleaner - Air
6	140-1531	1	Bracket, Support - Air Duct	15	140-1504	1	Cover, Cleaner - Air
7	821-0009	6	Screw, Cap - Hex Head Locking (1/4-20 x 3/8")	16	140-1522	1	Spacer, Intake - Air
8	140-1521	1	Seal, Air Duct to Breather Port	17	140-1529	1	Bracket, Duct - Air Intake
9	870-0212	2	Nut, Hex - Locking (1/4-20)	18	140-1528	1	Brace, Duct - Air Intake
				19	140-1533	2	Seal, Element - Air Cleaner

Carburetor Air Preheater

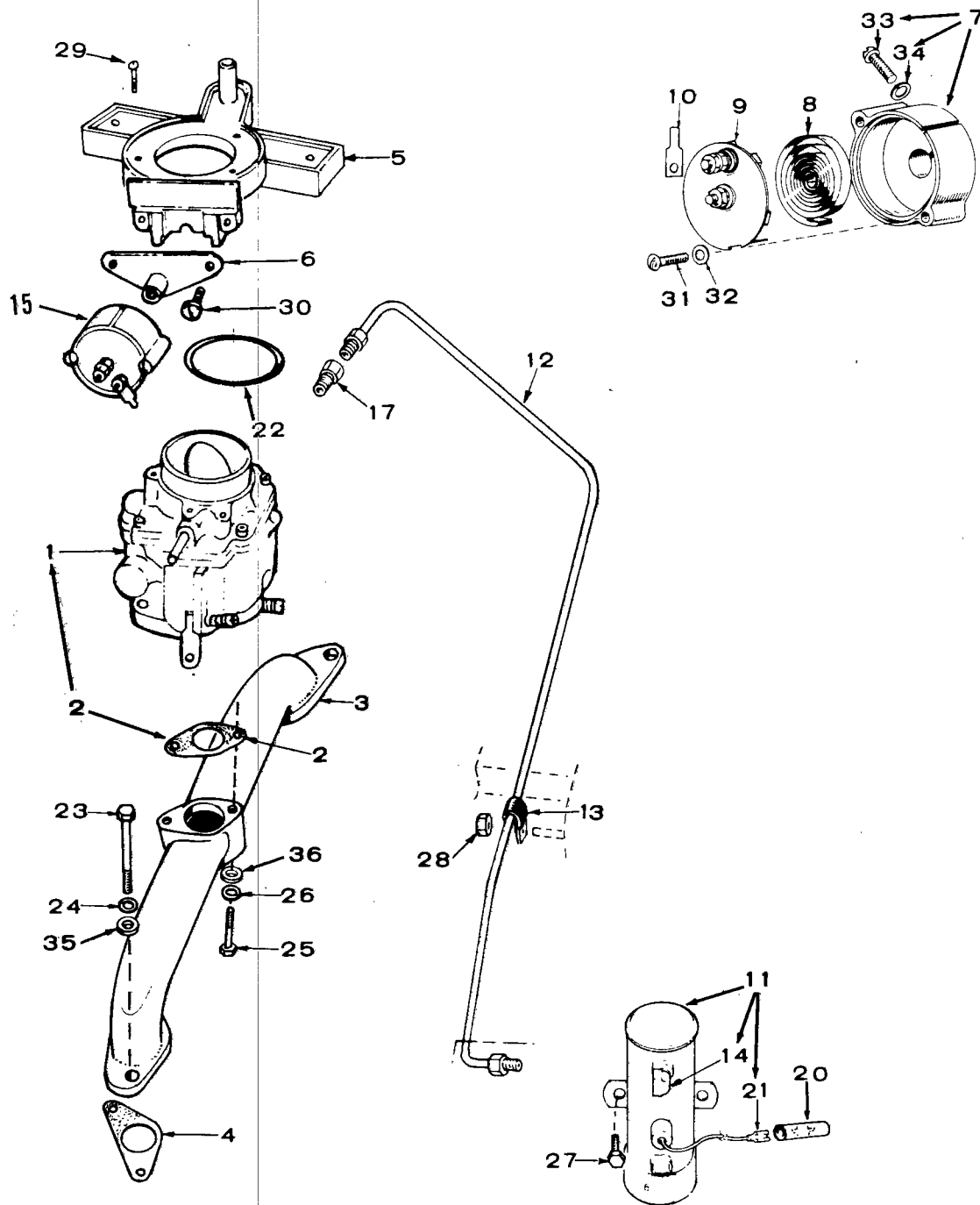


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	140-0788	1	Control, Temperature - Air (Includes Parts Marked *)
2	140-0785	1	*Housing, Control
3	140-0782	1	*Shutter
4	140-0786	1	*Spring, Return - Shutter
5	140-0784	1	*Plunger
6	140-0808	1	*Spacer, Vernatherm
7	140-0787	1	*Spring, Vernatherm
8	518-0205	2	*Ring, Retaining
9	870-0195	1	*Palnut
10	309-0181	1	*Vernatherm
11	140-1742	1	Wrapper, Cleaner - Air

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	503-0311	3	Clamp, Hose
13	503-1056	2	Hose, Duct Side Mounted (5.62" Long)
	503-1075	2	Over the Rails (5.25" Long)
14			Bracket and Tube
	140-1733	1	Side Mounted
	140-1752	1	Over the Rails
15	140-1737	1	U-Bolt, Bracket - Air Duct
16	870-0257	2	Nut, Flange - Self Lock (5/16-18)

* - Parts Included in 140-0788 Air Temperature Control.

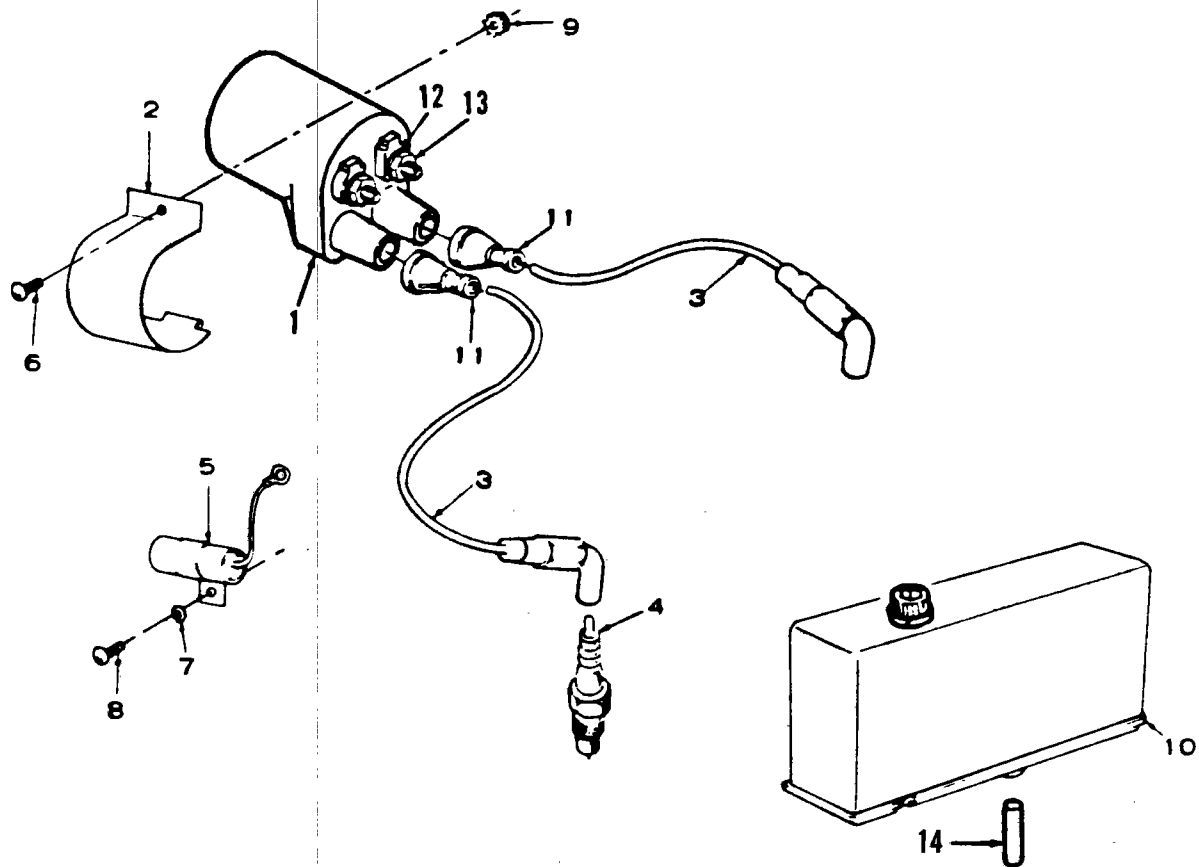
Fuel System (Gasoline)



Fuel System (Gasoline)

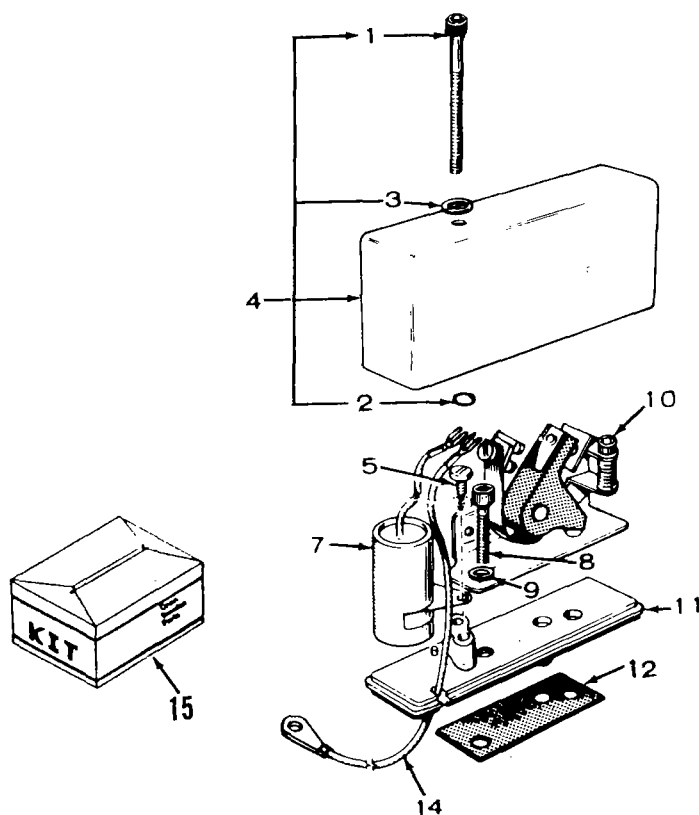
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Carburetor (Includes Mounting Gasket) (See Separate Page for Components)	21	332-1993	1	*Terminal, Lead - Fuel Pump
	146-0308	1	Walbro	22	509-0145	1	Seal, O-Ring
	146-0419	1	Nikki	23	800-0058	4	Screw, Cap - Hex Head (3/8-16 x 3")
2	154-0733	1	Gasket, Mounting - Carburetor	24	740-1006	4	Washer, Flat (M8)
3	154-2292	1	Manifold, Intake	25	800-0035	2	Screw, Cap - Hex Head (5/16-18 x 2-1/2")
4	154-1483	2	Gasket, Mounting - Intake Manifold	26	850-0045	2	Washer, Lock - Spring (5/16")
5	140-1492	1	Adapter, Duct - Air	27	821-0009	2	Screw, Cap - Hex Washer Head (1/4-20 x 3/8")
6	153-0499	1	Adapter, Choke	28	862-0015	1	Nut, Hex (5/16-18)
7	153-0058	1	Housing, Choke	29	804-0017	3	Screw, Cap - Socket Head (#10-32 x 1/2")
8	153-0017	1	Bi-Metal, Choke	30	815-0359	2	Screw, Tapping - Hex with ET (#10-32 x 7/8")
9	153-0114	1	Element and Cover, Choke	31	815-0285	2	Screw, Machine - Round Head with ET (#8-32 x 5/16")
10	332-0527	1	Terminal, Wire	32	526-0062	2	Washer, Flat - Brass (#10 Screw)
11	149-1828	1	Pump, Fuel - Electric (Includes Terminal and Elbow)	33	815-0110	1	Screw, Machine - Fillister Head (#10-32 x 7/8")
12	149-1554	1	Line, Fuel Pump to Carburetor	34	850-0030	1	Washer, Lock - Spring (#10)
13	518-0350	1	Clamp, Loop - Fuel Line (Insulated)	35	526-0030	4	Washer, Flat (3/8" Screw)
14	502-0002	1	*Elbow, Male - Inverted	36	526-0022	1	Washer, Flat (5/16" Screw)
15	153-0440	1	Housing, Choke (Includes Washer and Screw)				
17	502-0003	1	Connector, Male - Inverted				
20	332-1506	1	Connector, Lead - Fuel Pump				

Ignition System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	166-0772	1	Coil, Ignition	8	815-0350	1	Screw, Tapping - Hex Washer Head (#10-32 x 3/8" Lg)
2	166-0588	1	Clamp, Mounting - Ignition Coil	9	870-0131	1	Nut, Hex - W/ET (#10-32)
3	167-1602	2	Lead, Plug - Spark	10	160-1303	1	Box, Breaker - Complete (Includes Mounting Gasket) (See Separate Page for Components)
4	167-0291	2	Plug, Spark	11	160-0558	2	Nipple, Spark Plug
5	312-0027	1	Condenser, Ignition	12	850-2005	2	Washer, Flat (Metric)
6	815-0350	1	Screw, Cap - Hex Washer Head (#10-32 x 3/8")	13	166-0554	2	Nut, Hex (Metric)
7	856-0003	1	Washer, Lock - External/Internal Condenser Mounting (#10)	14	160-1151	1	Plunger, Points - Breaker

Breaker Box

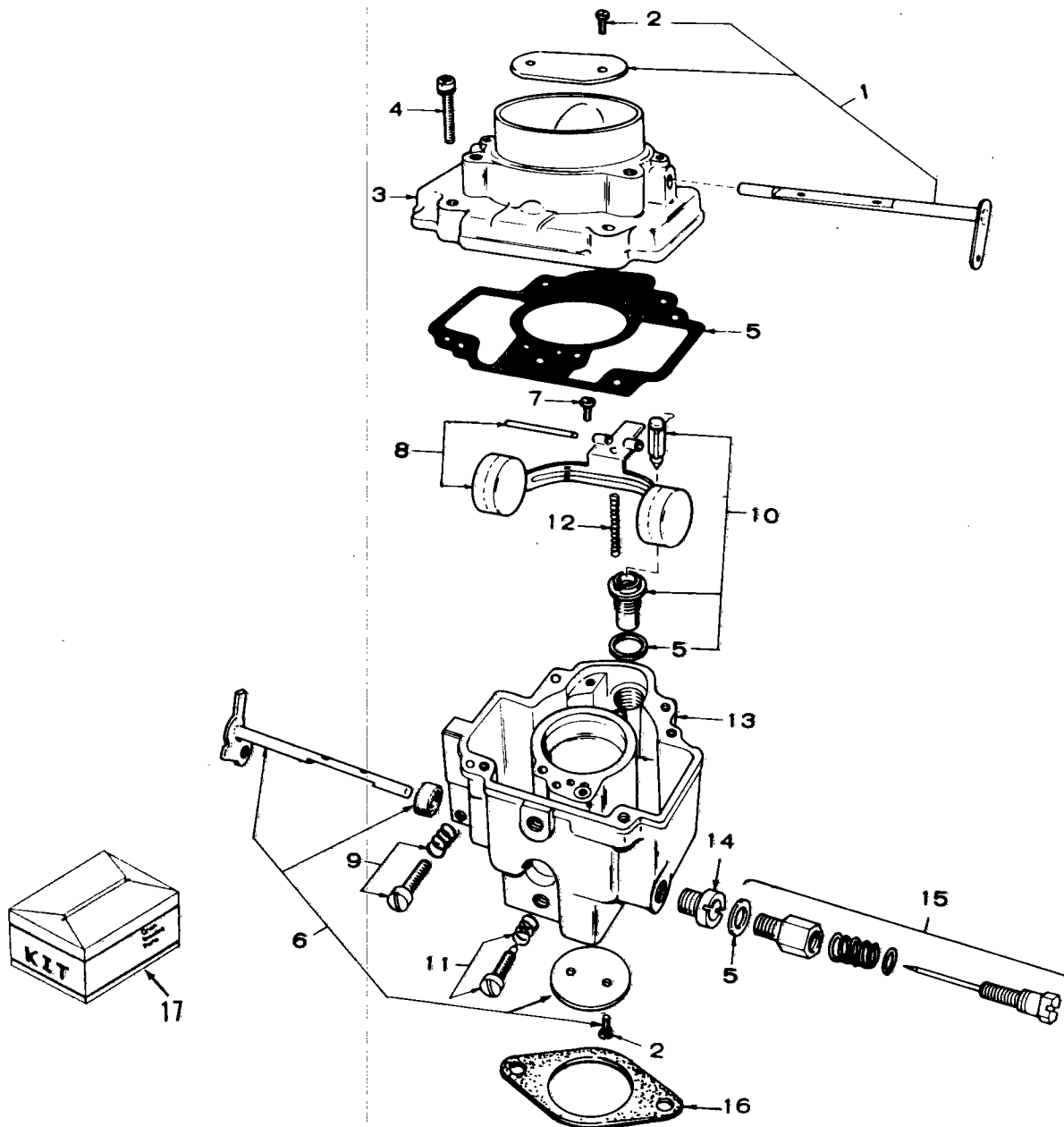


ES-1057

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1303	1	Box, Breaker (Includes Parts Marked *)	8	802-0034	2	*Screw, Cap (1/4-20 x 3/4") - Socket Head
1	802-0022	1	*Screw, Cap - Hex Socket (#10-24 x 1-1/2")	9	850-0040	2	*Washer, Lock (1/4")
2	509-0065	1	*Retainer ("O" Ring)	10	160-1183	1	*Point Set, Breaker
3	526-0008	1	*Washer, Flat (#10 Screw)	11	160-1219	1	*Base, Breaker
4	160-1285	1	*Cover, Box - Breaker	12	160-1150	1	*Gasket, Box - Breaker
5	815-0358	1	*Screw, Cap (#8-32 x 5/16") - Slotted	14	336-2378	1	Lead, Breaker Box to Coil
7	312-0246	1	*Condenser	15	160-1311		Kit, Tune Up (Includes Points and Condenser)

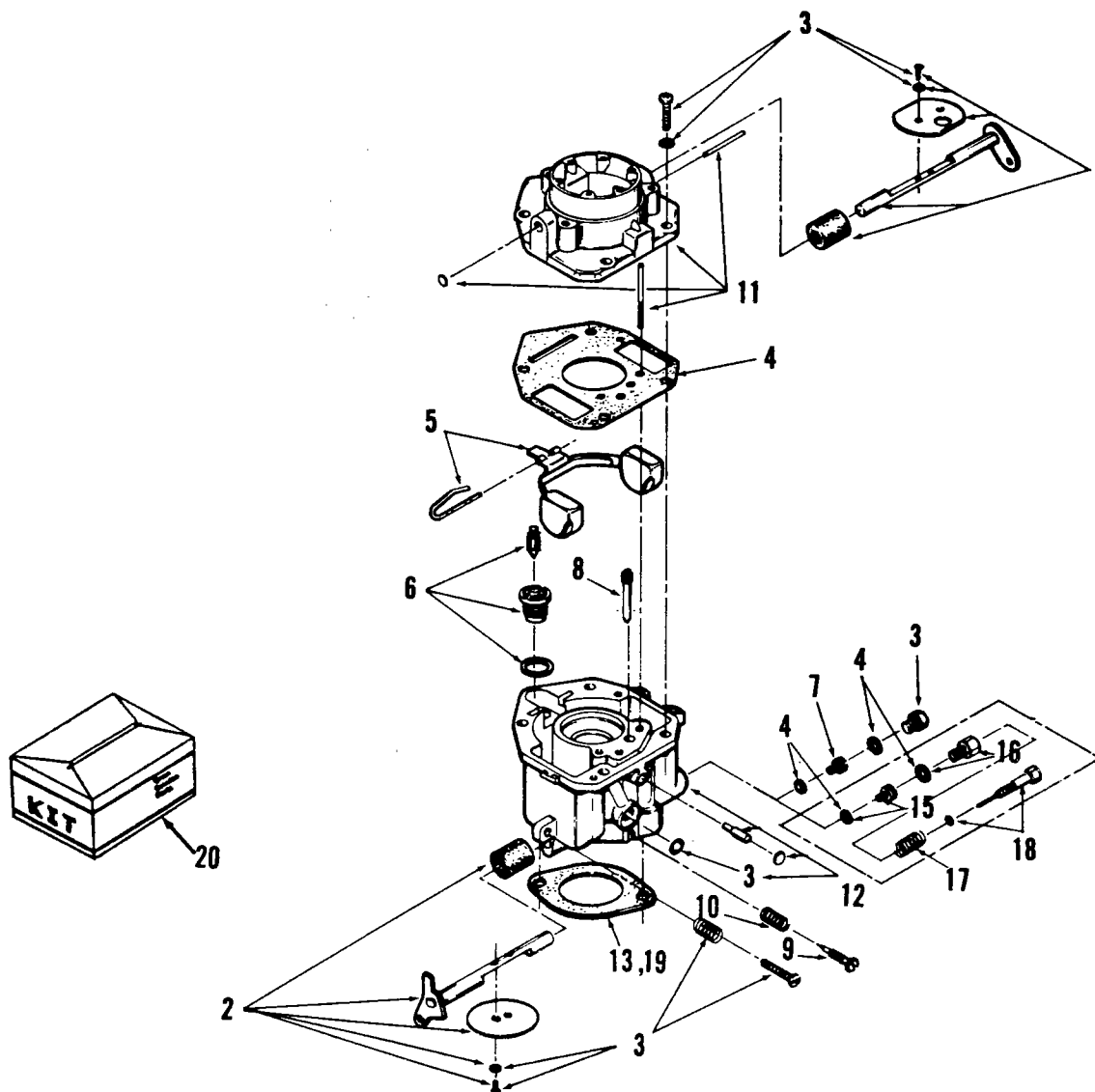
* - Parts Included in 160-1303 Breaker Box.

Carburetor Components (Adjustable Main Jet) (Gasoline) Walbro



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	146-0308	1	Carburetor, Complete (Includes Mounting Gasket)	9	146-0261	1	Kit, Screw - Idle Speed Adjusting
1	146-0265	1	Kit, Shaft - Choke	10	146-0289	1	Kit, Valve and Seat
2	146-0142	4	Screw, Mounting - Valve	11	146-0209	1	Kit, Needle - Idle
3		1	Intake, Air (Not Sold Separately)	12	146-0208	1	Spring, Buoyancy
4	146-0247	4	Screw, Body to Intake	13		1	Body (Not Sold Separately)
5	146-0220	1	Kit, Gasket	14	146-0243	1	Jet, Power
6	146-0267	1	Kit, Shaft - Throttle	15	146-0248	1	Kit, Needle - Power
7	146-0222	1	Screw, Pin - Lever	16	154-0733	1	Gasket, Mounting - Carburetor
8	146-0262	1	Kit, Float	17	146-0290	1	Kit, Repair

Carburetor Components **Nikki** **(Gasoline)**

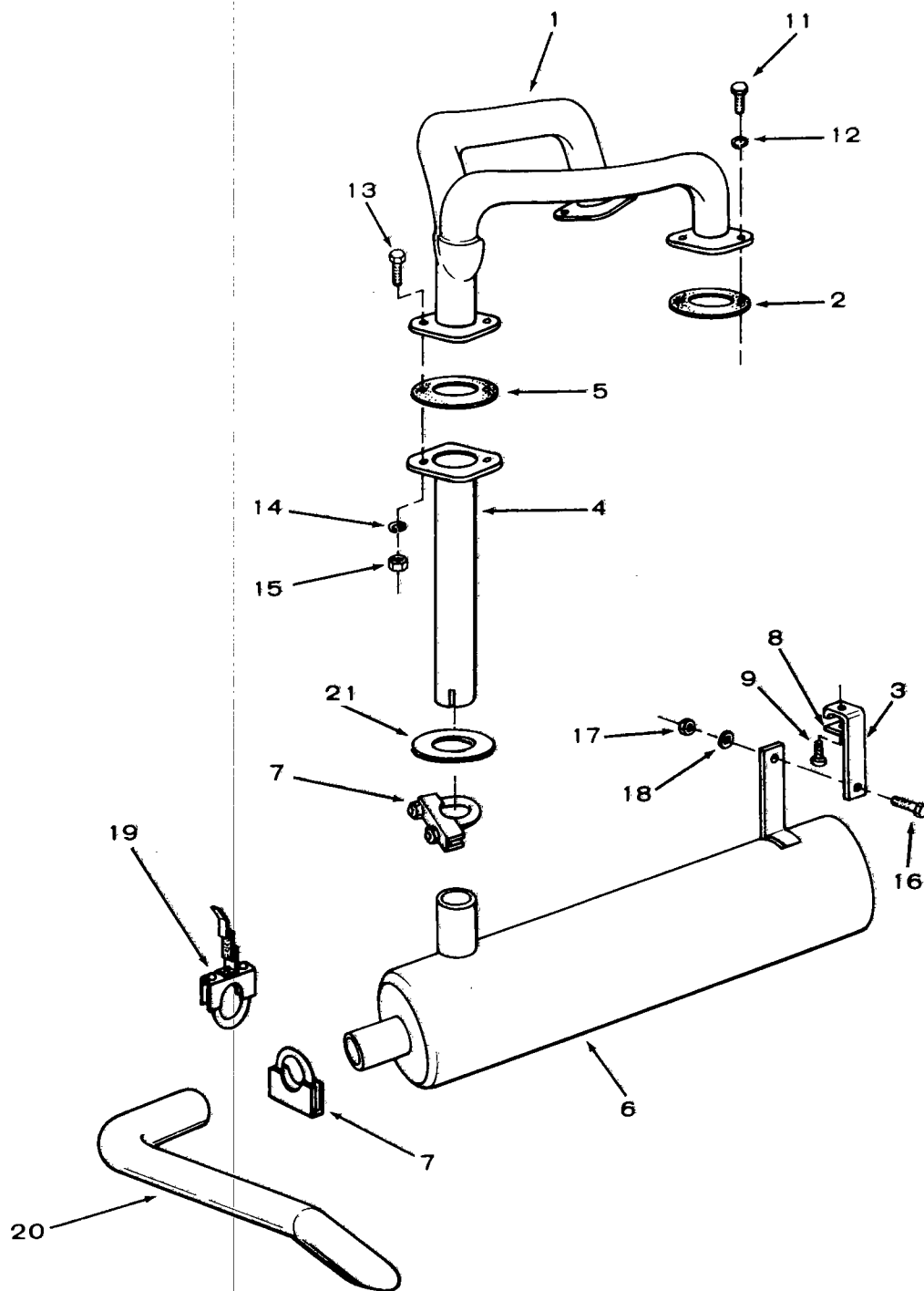


FS-1440

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	146-0419		Carburetor, Complete (Includes Mounting Gasket)	11		1	Intake, Air (Not Sold Separately)
1	146-0417	1	Kit, Shaft - Choke	12		1	Body (Not Sold Separately)
2	146-0418	1	Kit, Shaft - Throttle	13	154-0733	2	*Gasket, Mounting - Carburetor
3	146-0498	1	*Kit, Screw and Plug	15	146-0343	1	Jet, Power (Includes Gasket)
4	146-0326	1	*Kit, Gasket	16	146-0340	1	Retainer, Needle - Power (Includes Gasket)
5	146-0325	1	Kit, Float	17	146-0341	1	Spring, Needle - Power
6	146-0329	1	*Kit, Valve and Seat	18	146-0342	1	Needle, Power (Complete)
7	146-0343	1	Jet, Power	19	145-0438	1	*Gasket, Mounting - Carburetor
8	146-0420	1	Jet, Idle	20	146-0356	1	Kit, Repair (Includes Parts Marked *)
9	146-0335	1	*Needle, Adjusting - Idle				
10	146-0331	1	*Spring, Needle - Idle Adjusting				

* - Parts Included in 146-0356 Repair Kit.

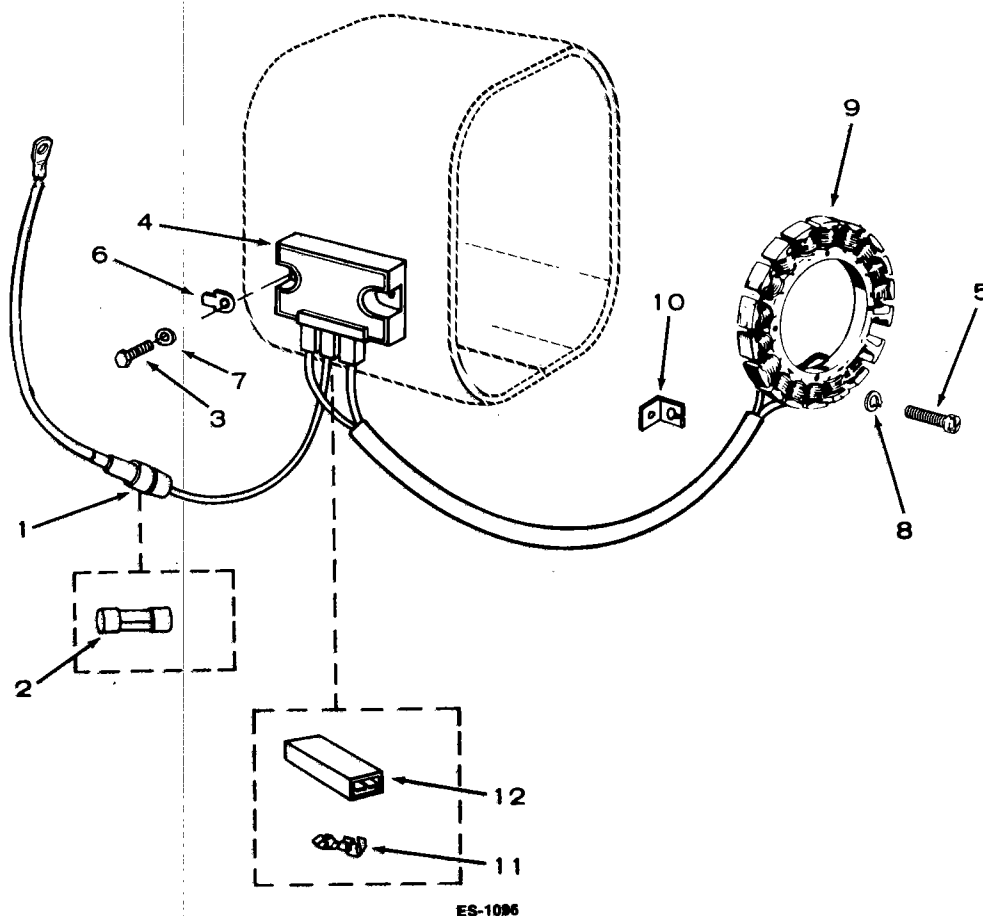
Exhaust System



Exhaust System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	154-1967	1	Manifold, Exhaust	11	800-0512	4	Screw, Cap - Hex Head (5/16-18 x 1")
2	154-1482	2	Gasket, Manifold - Exhaust	12	850-0045	4	Washer, Lock - Spring (5/16")
3	155-1895	1	Clamp, Hanger	13	800-0030	2	Screw, Cap - Hex Head (5/16-18 x 1-1/4")
4	154-2143	1	Tube, Exhaust	14	850-0045	2	Washer, Lock - Spring (5/16")
5	154-2800	1	Gasket, Tube - Exhaust	15	862-0015	2	Nut, Hex (5/16-18)
6	155-1906	1	Muffler, Exhaust For Units Mounted Over the Rails	16	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")
	155-1894	1	For Side Mounted Units	17	870-0048	1	Nut, Self Lock (5/16-18)
7			Clamp, Muffler	18	526-0113	1	Washer, Flat (5/16" Screw)
	155-1015	1	1-1/2" Dia.	19	155-1909	1	Hanger, Bracket
	155-1255	1	1-1/8" Dia.	20	155-1904	1	Tube, Exhaust
8	155-1896	1	Hanger, Muffler	21	155-1907	1	Seal, Tube - Muffler Air - Over the Rails Units
9	821-0005	1	Screw, Cap - Hex Washer Head (#10-32 x 1/2")				

Flywheel Alternator (15 Ampere)

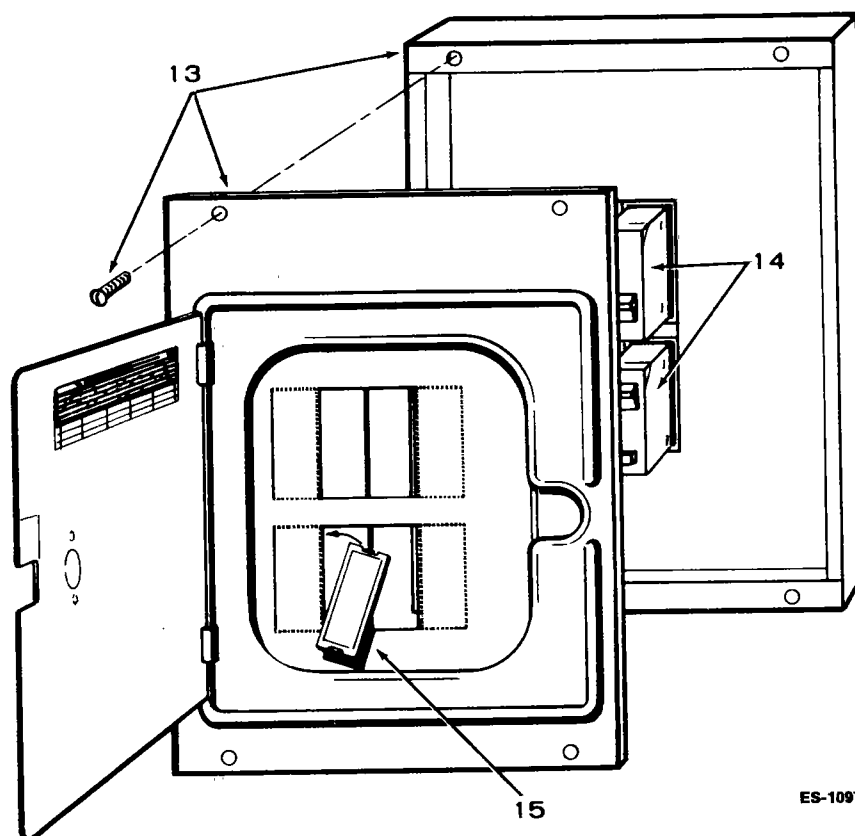


ES-1096

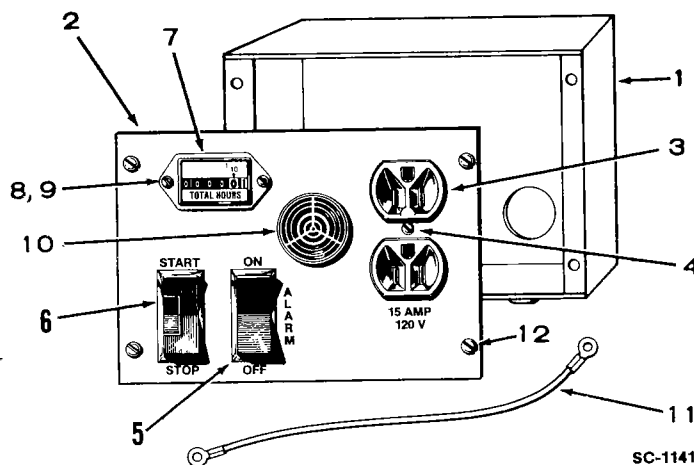
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	321-0242	1	Holder, Fuse (Includes Fuse)	7	526-0008	1	Washer, Flat (#10 Screw)
2	321-0165	1	Fuse (30 Amp, 32 Volt)	8	850-0030	3	Washer, Lock - Spring (#10)
3	815-0545	2	Screw, Machine - Hex Head W/ET (#10-32 x 1/2")	9	191-1346	1	Stator, Alternator (Includes Parts Marked *)
4	191-1351	1	Regulator, Voltage	10	167-0188	1	Clip, Lead - Alternator
5	813-0108	3	Screw, Machine - Round Head, Cross-Recessed (#10-32 x 1-1/2")	11	332-2423	3	*Terminal, Wire
6	332-0527	1	Terminal, Tab (1/4")	12	323-1216	3	*Body, Connector - Terminal

* - Parts Included in 191-1346 Alternator Stator.

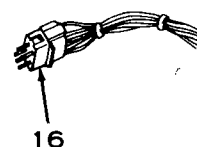
Control (Remote)



ES-1097

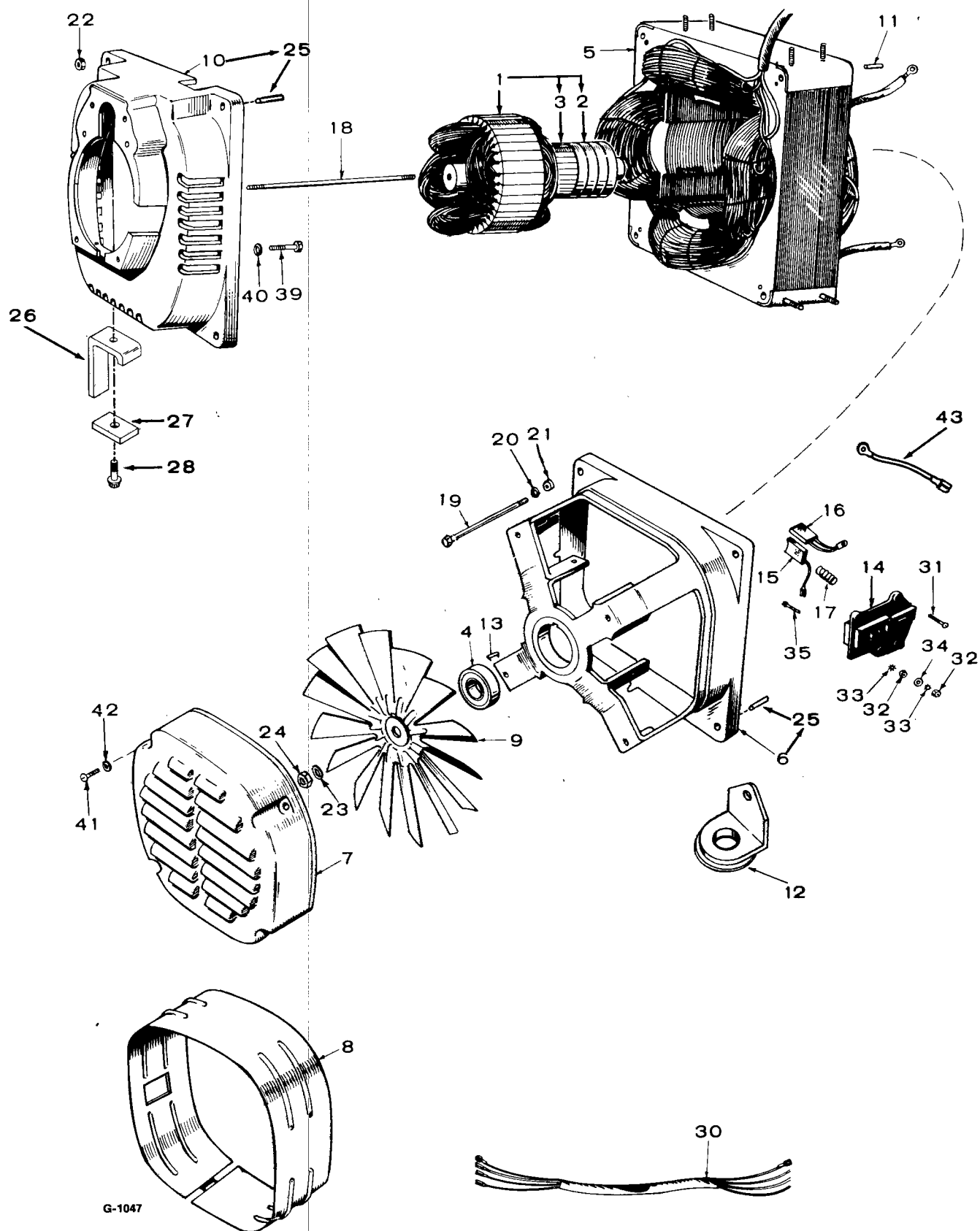


SC-1141



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	301-6206	1	Box, Control	10	333-0133	1	Alarm, Audible
2	301-6207	1	Panel, Control	11	336-7026	4	Lead, Wire - Use 4 Feet Bulk Wire
3	323-1104	1	Receptacle, Duplex (15 Amp, 120 Volt)	12	815-0350	4	Screw, Cap - Hex Washer Head (#10-32 x 3/8")
4	822-2030	1	Screw, Machine - Pan Head W/ET (#6-32 x 3/8")	13	320-0980	1	Box, Center - Load
5	308-0614	1	Switch, Rocker - Alarm (On-Off)	14	320-0976	1	Breaker, Circuit 15 Amp, 120 Volt (Ground Fault Interruptor)
6	308-0341	1	Switch, Rocker - SPST (Start-Stop)		320-0978	1	15 Amp, 120/240 Volt
7	302-0885	1	Meter, Hour		320-0979	1	20 Amp, 120/240 Volt
8	815-0385	2	Screw, Machine - Round Head (#6-32 x 1/2")	15	320-0982	1	Filler, Breaker
9	860-0005	2	Nut, Hex (#6-32)	16	338-1454	1	Harness, Wiring - Remote

Generator



G-1047

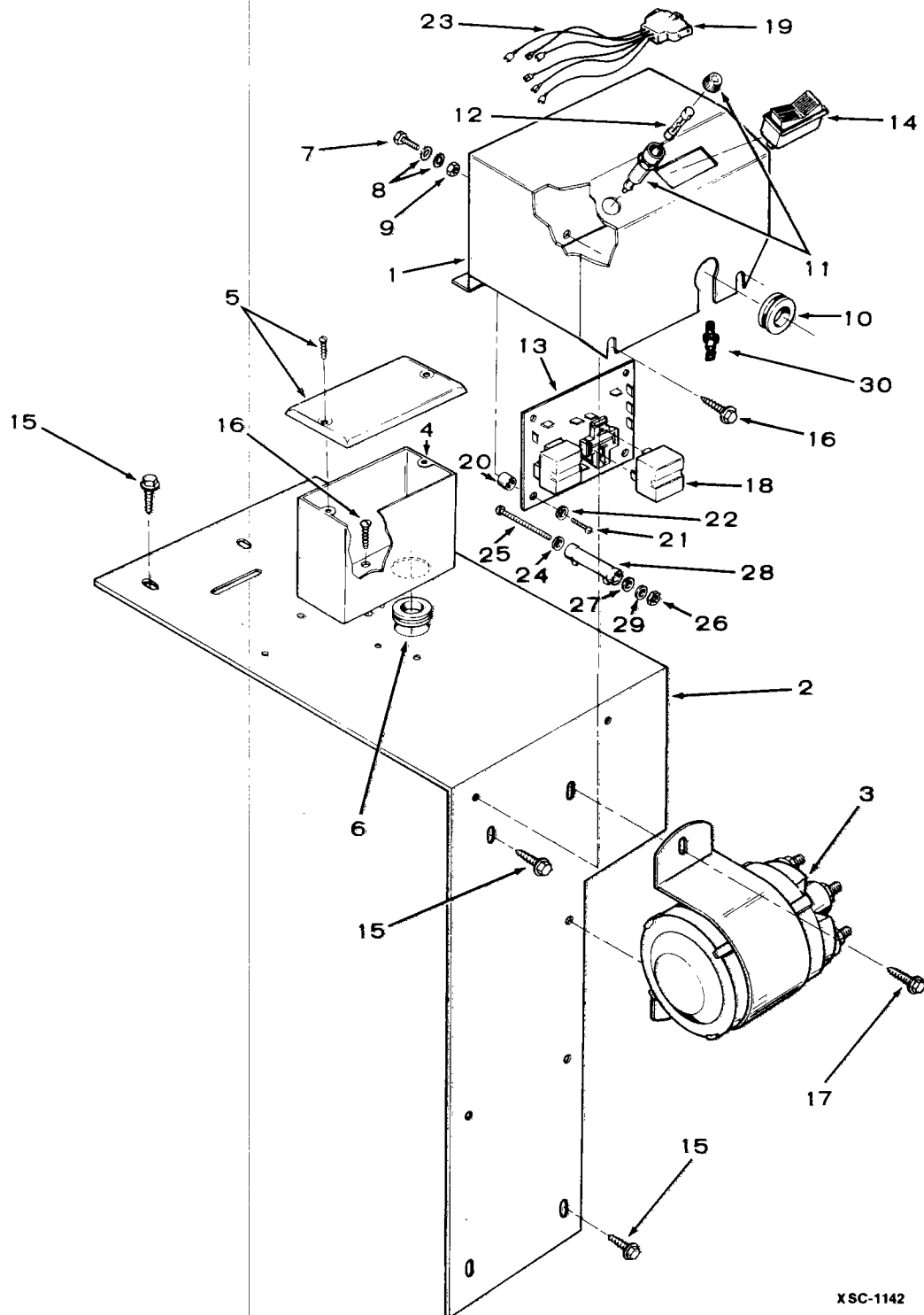
Generator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	201-2503		Armature, Generator - 60 Hertz (Includes Parts Marked *)	22	862-0015	4	Nut, Hex (5/16-18)
2	204-0110	1	*Ring, Collector - Generator	23	850-0055	1	Washer, Lock - Spring (7/16")
3	203-0152	1	*Commutator, Generator	24	870-0203	1	Nut, Hex (7/16-20)
4	510-0047	1	*Bearing, Ball	25	516-0196	4	Pin, Alignment
5	220-1816	1	Stator, Generator	26	155-1895	1	Hanger, Exhaust - Side Mounted Units
6	211-0364	1	Bell, End - Generator (Includes Alignment Pins)	27	155-1896	1	Clamp, Hanger - Side Mounted Units
7	232-2107	1	Cover, Generator	28	821-0005	1	Screw, Hex Washer Head - Self-locking (10-32 x 1/2")
8	234-0642	1	Wrapper, Generator	30	338-0946	1	Harness, Wiring
9	205-0090	1	Fan, Generator	31	815-0359	15	Screw, Tapping - Hex Head (#10-32 x 7/8" Lg)
10	231-0164	1	Adapter, Generator to Engine (Includes Alignment Pins)	32	871-0010	8	†Nut, Hex - Brass (#10-32)
11	516-0182	8	Pin, Straight - Headless	33	853-0008	8	†Washer, Lock - External (#10)
12	402-0475	2	Support, Generator	34	526-0049	4	†Washer, Flat - Brass (#10)
13	232-0596	1	Clip, Retaining - Bearing	35	815-0341	4	†Screw, Machine - Hex Head Brass (#10-32 x 1" Lg)
14			Block, Brush (Includes Parts Marked †)	39	800-0050	4	Screw, Cap - Hex Head (3/8-16 x 1-1/4" Lg)
	212-0359	1	Bottom and Right Side Positions	40	850-0050	4	Washer, Lock - Spring (3/8")
	212-0360	2	Top and Left Side Positions	41	812-0156	2	Screw, Machine - Round Head (1/4-20 x 1-1/4" Lg)
15	214-0095	4	Brush, DC	42	850-0040	2	Washer, Lock - Spring (1/4")
16	214-0096	8	Brush, AC	43	336-1891	4	Lead, Block - Brush
17	212-1232	12	Spring, Brush				
18	520-0733	1	Stud				
19	800-0044	4	Screw, Cap - Hex Head (5/16-18 x 7-1/2" Lg)				
20	850-0045	4	Washer, Lock - Spring (5/16")				
21	526-0115	4	Washer, Flat (5/16" Screw)				

* - Parts Included in Armature.

† - Parts Included in Generator Brush Blocks.

Control

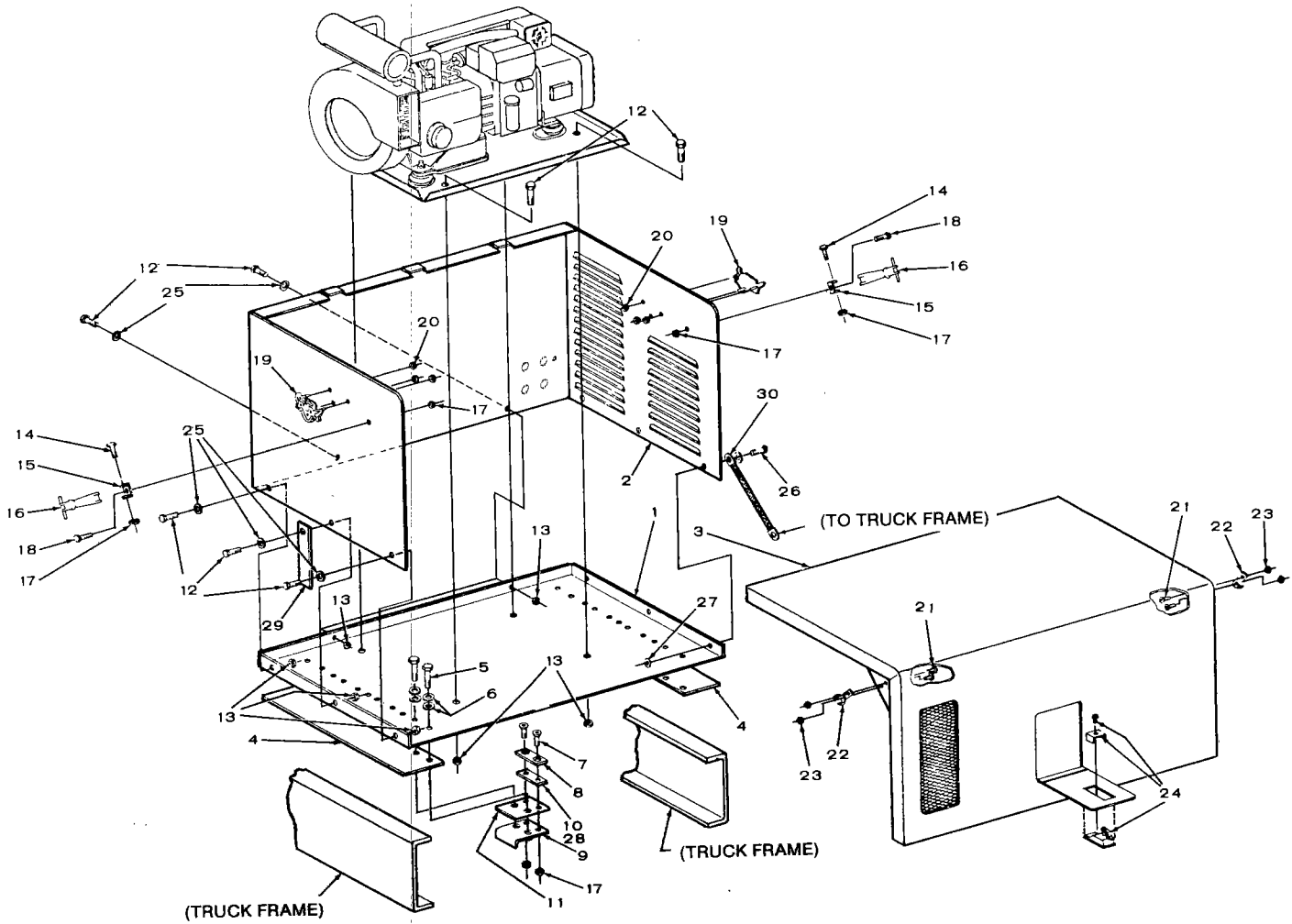


XSC-1142

Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	301-6197	1	Box, Control	17	821-0009	2	Screw, Cap - Hex Washer Head (1/4-20 x 3/8")
2	301-6227	1	Bracket, Mounting - Control	18	307-1899	2	Relay (SPDT)
3	307-1896	1	Relay, Solenoid - Start	19	323-1221	1	Connector, Cap
4	330-0074	1	Box, Outlet	20	870-0342	4	Spacer, Threaded
5	330-0004	1	Cover, Box - Outlet	21	812-0059	4	Screw, Machine - Round Head (#6-40 x 1/4")
6	508-0191	1	Grommet, Nylon	22	850-0020	4	Washer, Lock - Spring (#6)
7	821-0010	1	Screw, Cap - Hex Washer Head (1/4-20 x 1/2")	23		1	Lead, Wire (4 Ft. Piece of Bulk Wire)
8	856-0006	1	Washer, Lock - EIT (1/4")	24	304-0580	1	Insulator, Resistor
9	862-0001	1	Nut, Hex (1/4-20)	25	812-0087	1	Screw, Machine - Round Head (#8-32 x 1-1/2")
10	508-0008	1	Grommet	26	870-0221	1	Nut, Hex W/ET (#8)
11	321-0175	1	Holder, Fuse	27	508-0015	1	Washer, Fibre
12			Fuse	28	352-0161	1	Resistor (100-Ohm, 5 Watt)
	321-0298	1	5 Amp, 250 Volt	29	526-0048	1	Washer, Flat (#8 Screw)
	321-0146	1	10 Amp, 32 Volt	30	357-0030	1	Rectifier, Silicon
13	300-2170	1	Board, Circuit - Printed				
14	308-0383	1	Switch, Push (SPDT)				
15	815-0350	2	Screw, Tapping - Hex Washer Head (#10-32 x 3/8")				
16	815-0350	3	Screw, Tapping - Hex Washer Head (#10-32 x 3/8")				

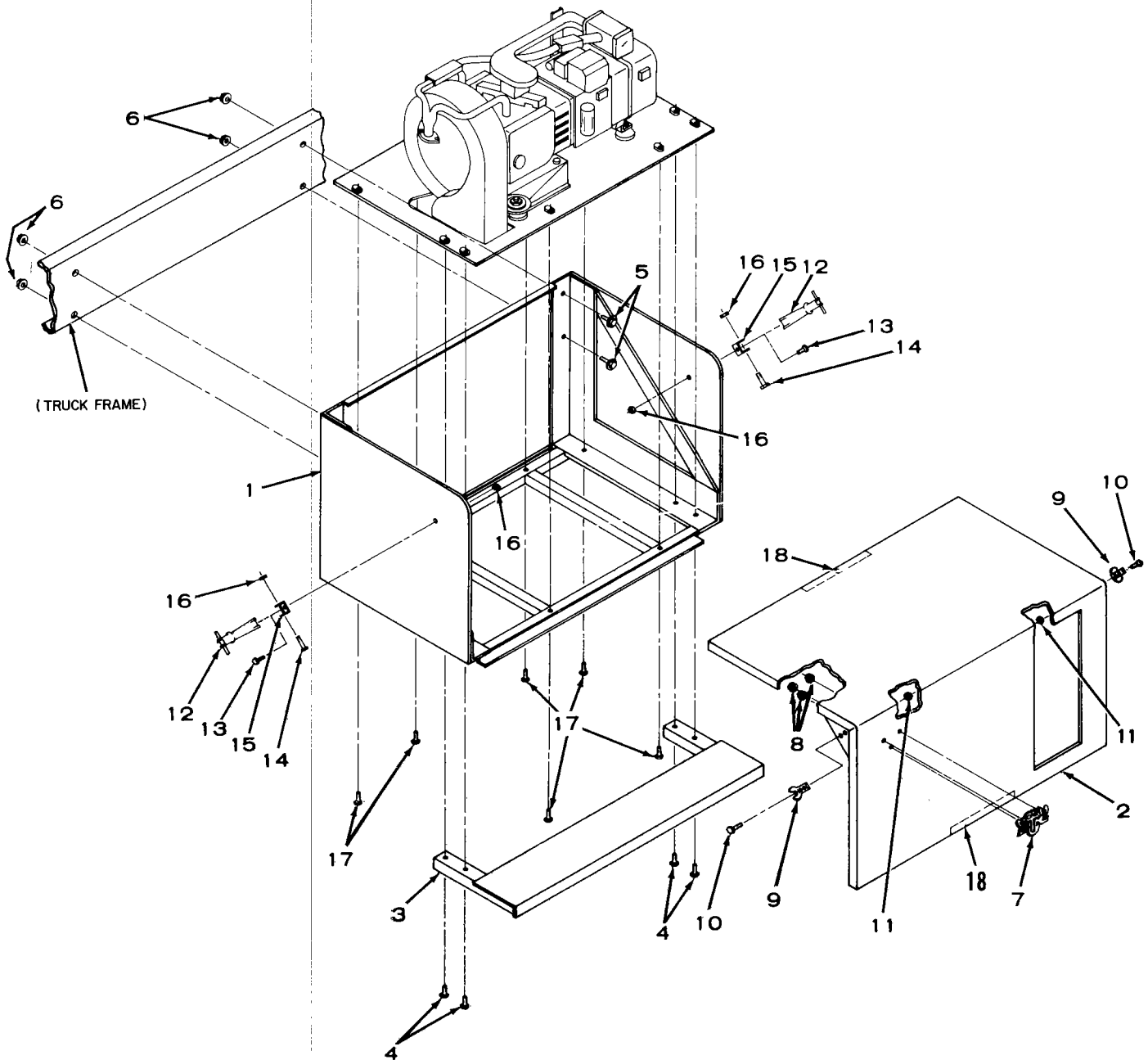
Housing (Over-the-Rails)



Housing (Over-the-Rails)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	405-2842	1	Baseplate, Housing	16	406-0497	2	Handle, Latch
2	405-2840	1	Housing	17	870-0048	12	Nut, Lock (5/16-18")
3	405-2841	1	Cover	18	800-0026	2	Screw, Cap - Hex Head (5/16-18 x 3/4")
4	405-2906	2	Gasket, Mounting	19	99-1575	2	Nameplate (AUX)
5	800-0094	8	Screw, Cap - Hex Head (1/2-13 x 2")	20	870-0362	6	Nut, Self Threading (1/4")
6	851-0035	16	Washer, Conical (1/2")	21	815-0551	4	Screw, Cap - Flush Socket (#10-24 x 1/2")
7	815-0553	8	Screw, Cap - Flush Socket (5/16-18 x 1-1/2")	22	406-0496	2	Bracket, Latch
8	405-2847	4	Spacer, Clamp - Mounting	23	870-0364	4	Nut, Self Lock (#10-24)
9	405-2844	4	Clamp, Mounting	24	406-0401	1	Latch, Flush
10	405-2856	8	Spacer, Clamp - Mounting (1/4" Thk)	25	526-0026	8	Washer, Flat (3/8" Screw)
11	405-2902	4	Gasket, Clamp - Mounting	26	800-0051	1	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
12	800-0050	11	Screw, Cap - Hex Head (3/8-16 x 1")	27	856-0010	1	Washer, Lock - EIT (3/8")
13	870-0368	12	Nut, Lock (3/8-16")	28	405-2901	8	Spacer, Mounting - Housing (1/16" Thk)
14	800-0033	2	Screw, Cap - Hex Head (5/16-18 x 2")	29	405-2904	1	Strap, Tether
15	406-0495	2	Bracket, Latch	30	337-0090	1	Strap, Electrical

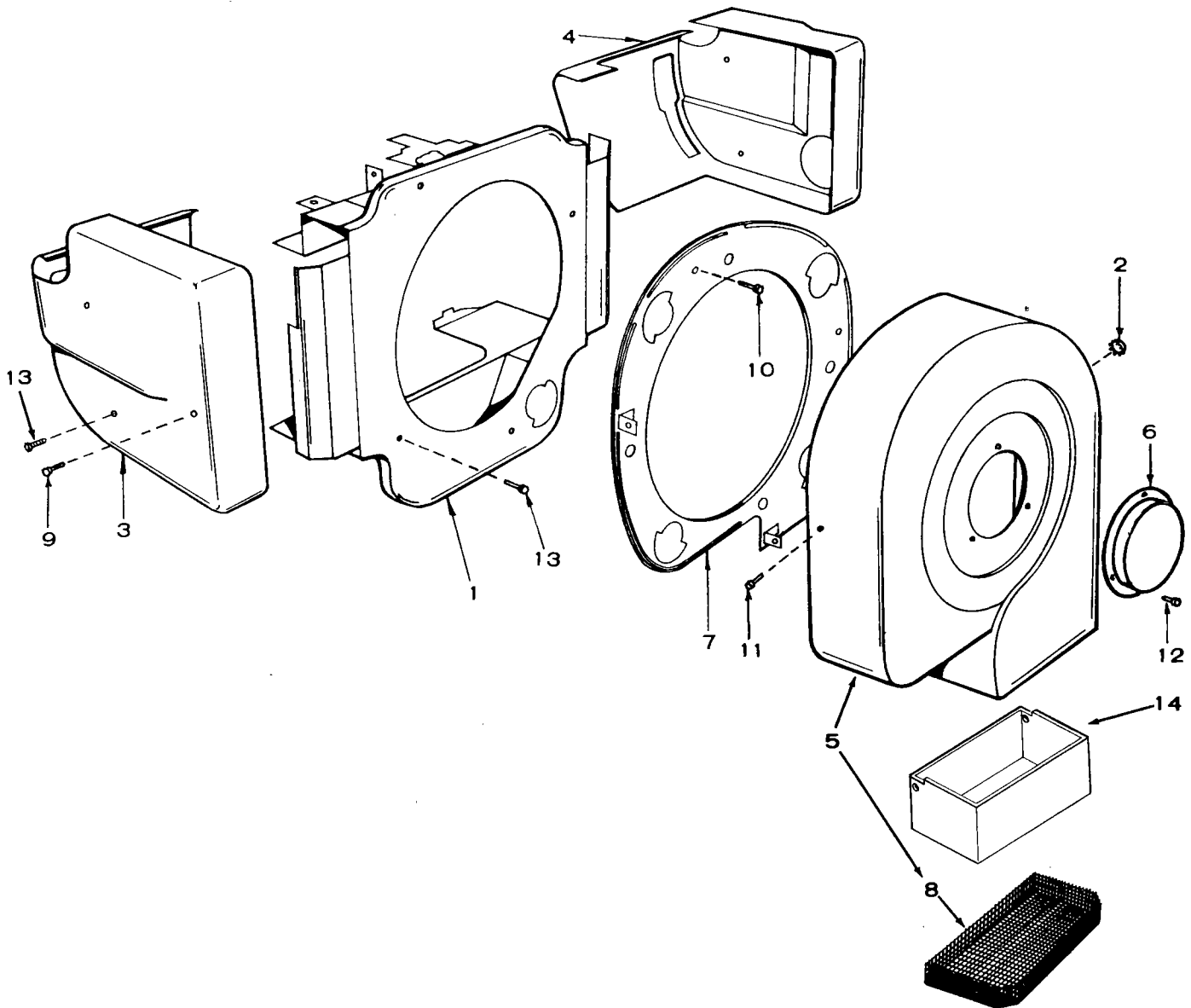
Housing (Side Mounted)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403-1835	1	Frame
2	405-2801	1	Cover
3	403-1793	1	Step, Truck
4	821-0030	4	Screw, Cap - HWH (3/8-16 x 1")
5	800-0560	4	Bolt, Cap - HWH (5/8-11 x 2") (Grade 8)
6	870-0363	4	Nut, HWH (5/8-11) (Grade 8)
7	99-1575	1	Nameplate (AUX)
8	870-0362	3	Nut, Tapping - Hex Head (1/4")
9	406-0496	2	Bracket, Latch
10	821-0001	4	Screw, Machine - Hex Head (#10-24 x .38")

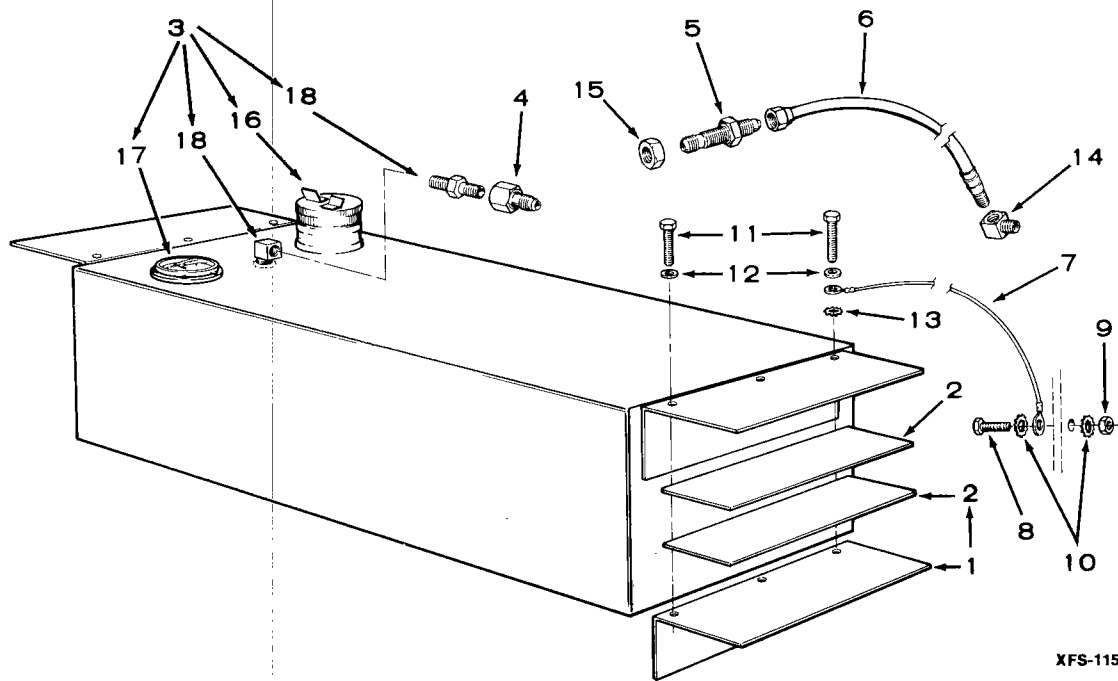
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	870-0364	4	Nut, HWH (#10-24)
12	406-0497	2	Handle, Latch
13	800-0026	2	Screw, Cap - Hex Head (5/16-18 x 3/4")
14	800-0033	2	Screw, Cap - Hex Head (5/16-18 x 2")
15	406-0495	2	Bracket, Latch
16	870-0048	4	Nut, Hex - Self Lock (5/16-18)
17	821-0029	6	Screw, Cap - HWH (3/8-16 x 3/4")
18	405-2805	2	Gasket, Isolator

Air Housing



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-4095	1	Housing, Blower	8	134-4316	1	Guard, Scroll
	134-4132	1	Side Mounted Units		134-2763	1	Wire (Begin 6/83)
2	517-0021	1	Mounted Over the Rails			1	Screen (Begin 6/83)
3	134-3617	1	Plug, Button	9	821-0010	2	Screw, Tapping - Hex Head
		1	Housing, Air - Cylinder				(1/4-20 x 1/2")
			(Left Side)	10	821-0010	4	Screw, Tapping - Hex Head
4	134-3618	1	Housing, Air - Cylinder				(1/4-20 x 1/2")
			(Right Side)	11	821-0010	5	Screw, Cap - Hex Washer Head
5			Scroll, Air				(1/4-20 x 3/8")
	134-2761	1	Side Mounted Units (Includes	12	821-0009	3	Screw, Self-locking - Hex
			Guard) Prior to 6/83				Head (1/4-20 x 3/8" Lg)
	134-2749	1	Without Guard (Begin 6/83)	13	815-0261	6	Screw, Tapping - Hex Head
	134-4150	1	Over the Rail Units				(1/4-20 x 7/16" Lg)
			(Without Guard)	14	134-4129	1	Extension, Scroll - Over the
6	134-3119	1	Cover, Scroll				Rails Units
7	134-2747	1	Backplate, Scroll		403-1523-01	2	Bracket, Lifting (Not Shown)
							Begin Spec R

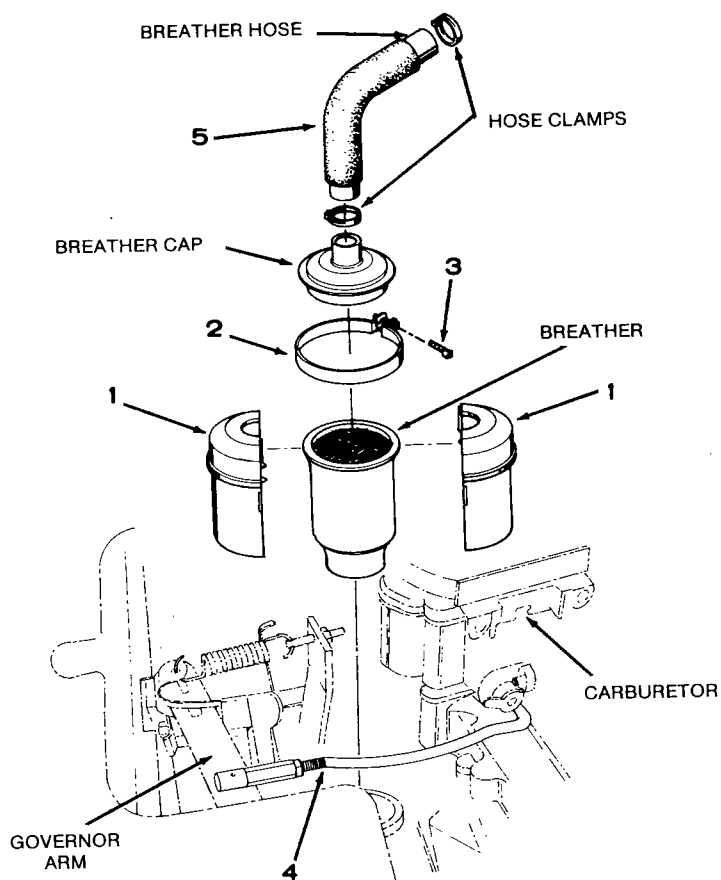
Fuel Tank



XFS-1159

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	415-0504	2	Bracket and Gasket, Fuel Tank	10	856-0006	2	Washer, Lock - EIT (1/4")
2	415-0503	4	Gasket Only, Fuel Tank Bracket	11	800-1031	6	Screw, Cap - Hex Head (5/16-18 x 1-1/2")
3	415-0500	1	Tank, Fuel (Includes Filler Cap and Gauge)	12	850-0045	6	Washer, Lock - Spring (5/16")
4	502-0758	1	Connector, Female (37°)	13	856-0008	1	Washer, Lock - EIT (5/16")
5	502-0745	1	Union, Bulkhead	14	502-0356	1	Elbow, Inlet - Fuel Pump
6	501-0356	1	Line, Fuel	15	867-1004	1	Nut, Hex (7/16-20)
7	336-7294	1	Strap, Ground	16	415-0533	1	Cap, Tank - Fuel
8	800-1007	1	Screw, Cap - Hex Head (1/4-20 x 1")	17	415-0534	1	Gauge, Fuel
9	862-1001	1	Nut, Hex (1/4-20)	18	415-0535	1	Pick Up, Tank - Fuel

Breather Insulation



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	123-0998	2	Insulator, Breather
2	518-0268	1	Clamp, Breather
3	809-0035	1	Screw, RH (#8 x 3/4")
4	150-0979	1	Rod, Governor Control
5	503-1189	1	Insulation, Breather Hose

Labels, Paint, Thread Sealant, and Gasket Kits

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	98-4461	1	Kit, Decal		145-0438	1	*Gasket, Carburetor Adapter
	168-0190	1	Kit, Gasket - Carbon Removal (Includes Parts Marked +)		122-0774	1	*Gasket, Adapter - Oil Filter
	110-3136	2	+Gasket, Guide - Valve		123-1470	1	*Gasket, Cap - Oil Fill
	110-2987	2	+Gasket, Head - Cylinder		149-0003	1	*Gasket, Pump - Fuel
	110-3575	3	+Gasket, Cover - Valve		154-0733	1	*Gasket, Adapter to Carburetor
	110-3604	2	+Seal, Oil (Valve)		154-2800	2	*Gasket, Manifold - Exhaust
	154-2061	2	+Gasket, Manifold/Muffler - Exhaust		154-2219	2	*Gasket, Manifold - Intake
	154-2219	2	+Gasket, Manifold - Intake		154-2747	2	*Gasket, Manifold - Exhaust
	154-2542	1	+Gasket, Manifold/Muffler - Exhaust		160-1368	1	*Gasket, Box - Breaker
	154-2747	2	+Gasket, Manifold - Exhaust		509-0008	1	*Seal, Oil (Gov. Shaft)
	168-0191	1	Kit, Gasket - Engine Complete (Includes Parts Marked *)		509-0040	1	*Seal, Oil (Gearcase)
	101-0782	1	*Gasket, Plate - Rear Bearing		509-0041	1	*Seal, Oil (Bearing Plate)
	102-1387	1	*Gasket, Base - Oil		509-0117	1	*O-Ring, 1.75 OD, 1.50 ID
	103-0810	1	*Gasket, Gearcase		509-0145	1	*O-Ring, Air Cleaner to Carburetor
	110-2987	2	*Gasket, Head - Cylinder		525-0454	1	Paint, Touch-Up - Enamel (Greige) 13 Oz. Pressurized Can (Spec P)
	110-3136	2	*Gasket, Guide - Valve		525-0305	1	Paint, Touch-Up - (Non-Metallic Green) - 13 oz. Pressurized Can (Spec R)
	110-3575	3	*Gasket, Box - Valve		518-0452	1	Sealant, Thread (50cc Bottle)
	110-3604	2	*Seal, Stem - Valve (11/32")		518-0347	1	Loctite, Bottle (250cc)
	120-0161	1	*Kit, Gasket - Oil Pump				

+ - Parts Included in 168-0190 Gasket Kit.

* - Parts Included in 168-0191 Gasket Kit.

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
98-4461	36	110-1933-05	5	123-0958	5	146-0247	20
99-1575	31	110-1933-10	5	123-0998	35	146-0248	20
99-1575	32	110-1933-25	5	123-1400	9	146-0261	20
101-0405	5	110-2340	5	123-1417	5	146-0262	20
101-0432	5	110-2987	5	123-1470	9	146-0265	20
101-0432-02	5	110-2987	36	123-1470	36	146-0267	20
101-0432-10	5	110-3136	36	134-2747	33	146-0289	20
101-0432-20	5	110-3167	5	134-2749	33	146-0290	20
101-0432-30	5	110-3168	5	134-2761	33	146-0308	17
101-0439	5	110-3549	5	134-2763	33	146-0308	20
101-0450	5	110-3575	5	134-3119	33	146-0325	21
101-0450-02	5	110-3575	36	134-3617	33	146-0326	21
101-0450-10	5	110-3604	36	134-3618	33	146-0329	21
101-0450-20	5	112-0069	11	134-4095	33	146-0331	21
101-0450-30	5	112-0228	11	134-4105	6	146-0335	21
101-0782	5	112-0228-05	11	134-4129	33	146-0340	21
101-0782	36	112-0228-10	11	134-4132	33	146-0341	21
102-0889	9	112-0228-20	11	134-4150	33	146-0342	21
102-0957	9	112-0228-30	11	134-4316	33	146-0343	21
102-1275	9	112-0228-40	11	140-0495	14	146-0356	21
102-1387	36	113-0203	11	140-0782	15	146-0417	21
102-1397	9	113-0203-05	11	140-0784	15	146-0418	21
103-0641	13	113-0203-10	11	140-0785	15	146-0419	17
103-0810	13	113-0203-20	11	140-0786	15	146-0419	21
103-0810	36	113-0203-30	11	140-0787	15	146-0420	21
104-0032	6	114-0036	11	140-0788	15	146-0498	21
104-0043	6	114-0188	11	140-0808	15	149-0003	13
104-0091	5	114-0188-02	11	140-1492	17	149-0003	36
104-0170	6	114-0188-10	11	140-1502	14	149-1554	17
104-0575	5	114-0188-20	11	140-1503	14	149-1828	17
104-0776	5	114-0188-30	11	140-1504	14	150-0075	7
104-1314	6	114-0203	11	140-1520	14	150-0078	7
105-0332	7	115-0006	5	140-1521	14	150-0096	13
105-0541	7	115-0006-05	5	140-1522	14	150-0639	13
105-0638	7	120-0140	10	140-1528	14	150-0678	13
110-0068	5	120-0161	10	140-1529	14	150-0979	13
110-0539	5	120-0161	36	140-1531	14	150-0979	35
110-0639	5	120-0398	10	140-1533	14	150-1187	13
110-0893	5	120-0413	10	140-1733	15	150-1519	7
110-0904	5	120-0491	10	140-1737	15	150-1520	7
110-1624	5	120-0680	5	140-1742	15	150-1542	13
110-1716	5	122-0320	10	140-1752	15	150-1577	13
110-1716-02	5	122-0323	10	145-0438	21	150-1612	13
110-1716-05	5	122-0347	10	145-0438	36	153-0017	17
110-1716-10	5	122-0360	10	146-0142	20	153-0058	17
110-1716-25	5	122-0774	10	146-0208	20	153-0114	17
110-1718	5	122-0774	36	146-0209	20	153-0440	17
110-1761	5	123-0951	5	146-0220	20	153-0499	17
110-1933	5	123-0952	5	146-0222	20	154-0733	17
110-1933-02	5	123-0954	5	146-0243	20	154-0733	20

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
154-0733	21	212-0360	27	336-7026	25	502-0356	34
154-0733	36	212-1232	27	336-7294	34	502-0745	34
154-1482	23	214-0095	27	337-0090	9	502-0758	34
154-1483	17	214-0096	27	337-0090	31	503-0171	5
154-1967	23	220-1816	27	338-0946	27	503-0311	15
154-2061	23	231-0164	27	338-1454	25	503-0568	9
154-2061	36	232-0596	27	352-0161	29	503-0857	5
154-2143	23	232-2107	27	357-0030	29	503-1056	15
154-2219	36	234-0642	27	402-0282	9	503-1075	15
154-2292	17	300-2170	29	402-0283	9	503-1189	35
154-2542	36	301-6197	29	402-0284	9	504-0092	9
154-2747	36	301-6206	25	402-0290	9	508-0008	29
154-2800	36	301-6207	25	402-0475	27	508-0015	29
155-1015	23	301-6227	29	402-0480	9	508-0191	29
155-1255	23	302-0885	25	402-0501	9	509-0008	13
155-1894	23	304-0580	29	402-0502	9	509-0008	36
155-1895	23	307-1896	29	403-1484	9	509-0040	13
155-1895	27	307-1899	29	403-1523-01	33	509-0040	36
155-1896	23	308-0341	25	403-1793	32	509-0041	5
155-1896	27	308-0383	29	403-1835	32	509-0041	36
155-1904	23	308-0614	25	403-1836	9	509-0065	19
155-1906	23	309-0181	15	405-2801	32	509-0117	5
155-1907	23	309-0319	10	405-2805	32	509-0117	36
155-1909	23	312-0027	18	405-2840	31	509-0145	17
160-0558	18	312-0246	19	405-2841	31	509-0145	36
160-1150	19	320-0976	25	405-2842	31	509-0168	5
160-1151	18	320-0978	25	405-2844	31	510-0013	13
160-1183	19	320-0979	25	405-2847	31	510-0014	13
160-1219	19	320-0980	25	405-2856	31	510-0015	7
160-1285	19	320-0982	25	405-2901	31	510-0047	27
160-1303	18	321-0146	29	405-2902	31	515-0001	6
160-1303	19	321-0165	24	405-2904	31	515-0001	7
160-1311	19	321-0175	29	405-2906	31	515-0227	6
160-1368	36	321-0242	24	406-0401	31	516-0072	5
166-0554	18	321-0298	29	406-0495	31	516-0130	13
166-0588	18	323-1104	25	406-0495	32	516-0141	13
166-0772	18	323-1216	24	406-0496	31	516-0182	27
167-0188	24	323-1221	29	406-0496	32	516-0196	27
167-0291	18	330-0004	29	406-0497	31	517-0021	33
167-1602	18	330-0074	29	406-0497	32	517-0048	5
168-0190	36	332-0527	17	415-0500	34	518-0004	13
168-0191	36	332-0527	24	415-0503	34	518-0014	6
191-1346	24	332-1506	17	415-0504	34	518-0205	15
191-1351	24	332-1993	17	415-0533	34	518-0268	35
201-2503	27	332-2423	24	415-0534	34	518-0294	11
203-0152	27	333-0133	25	415-0535	34	518-0347	36
204-0110	27	336-1891	27	501-0356	34	518-0350	17
205-0090	27	336-2378	19	502-0002	17	518-0390	14
211-0364	27	336-3967	9	502-0003	17	518-0452	36
212-0359	27	336-7000	10	502-0053	10	520-0717	5

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
520-0733	27	800-0035	17	821-0009	17	870-0131	18
520-0736	5	800-0044	27	821-0009	29	870-0195	15
520-0773	5	800-0047	9	821-0009	33	870-0203	27
520-0876	5	800-0050	27	821-0010	29	870-0212	14
520-0918	5	800-0050	31	821-0010	33	870-0221	29
520-0919	5	800-0051	5	821-0018	9	870-0257	15
525-0305	36	800-0051	31	821-0029	32	870-0342	29
525-0454	36	800-0058	17	821-0030	32	870-0362	31
526-0008	19	800-0064	9	822-2030	25	870-0362	32
526-0008	24	800-0094	31	850-0020	29	870-0363	32
526-0014	9	800-0512	23	850-0030	17	870-0364	31
526-0021	14	800-0560	32	850-0030	24	870-0364	32
526-0022	17	800-0575	5	850-0040	19	870-0368	31
526-0026	31	800-1007	34	850-0040	27	871-0010	27
526-0030	9	800-1031	34	850-0045	17		
526-0030	17	801-0050	10	850-0045	23		
526-0038	9	802-0022	19	850-0045	27		
526-0048	29	802-0034	19	850-0045	34		
526-0049	27	803-0071	5	850-0050	5		
526-0062	17	804-0017	17	850-0050	9		
526-0063	5	805-0010	11	850-0050	27		
526-0063	13	809-0035	5	850-0055	6		
526-0065	10	809-0035	35	850-0055	9		
526-0065	13	812-0059	29	850-0055	27		
526-0066	10	812-0087	29	850-2005	18		
526-0113	23	812-0156	27	851-0029	5		
526-0115	27	813-0108	24	851-0035	31		
526-0158	14	815-0046	13	853-0008	27		
526-0182	9	815-0110	17	856-0003	18		
526-0198	9	815-0194	10	856-0006	29		
526-0250	5	815-0261	33	856-0006	34		
526-0251	5	815-0285	17	856-0008	34		
526-0262	6	815-0341	27	856-0010	9		
526-0286	9	815-0350	18	856-0010	31		
526-0286	9	815-0350	25	856-0012	9		
526-0356	6	815-0350	29	856-0016	9		
740-1004	10	815-0358	19	860-0005	25		
740-1006	17	815-0359	17	862-0001	29		
800-0004	13	815-0359	27	862-0004	9		
800-0007	10	815-0385	25	862-0015	17		
800-0011	5	815-0545	24	862-0015	23		
800-0026	23	815-0551	31	862-0015	27		
800-0026	31	815-0553	31	862-1001	34		
800-0026	32	816-0070	14	865-0019	14		
800-0028	10	816-0206	9	867-1004	34		
800-0030	23	816-0207	9	870-0048	23		
800-0032	13	821-0001	32	870-0048	31		
800-0033	31	821-0005	23	870-0048	32		
800-0033	32	821-0005	27	870-0053	13		
800-0034	13	821-0009	14	870-0131	13		